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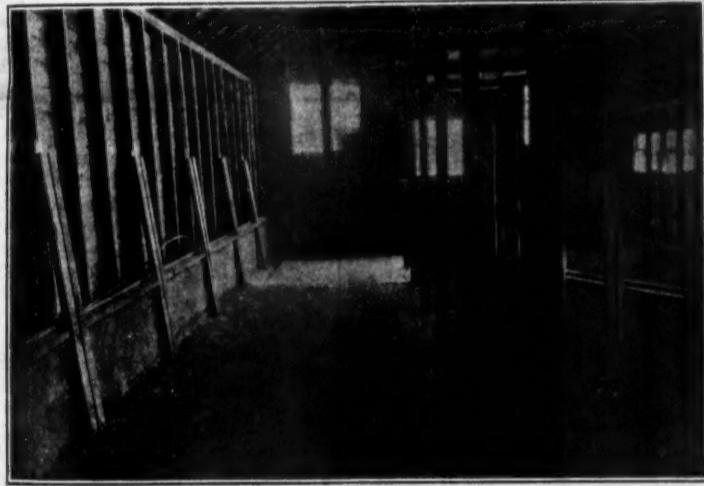
SANITARY FLOORS IN STOCK AND POULTRY HOUSES

Concrete Floors Are Effective in Preventing Vermin and Disease—Mixing and Laying the Concrete—A Cheap and Satisfactory Floor Can Be Easily Kept Clean and Never Wear Out.

Poultrymen and sheep and hog breeders are finding concrete a very satisfactory floor material for their buildings. Concrete floors have no cracks in which lice, ticks and similar vermin can breed and are likewise proof against the attack of rats and other destructive animals. Moreover,

door; for sheep sheds and hog houses, away from the animal's bed and in the direction of the gutters.

Mixing and Laying the Concrete.
The usual proportions of concrete for such floors are 1 cubic foot of Portland cement to $\frac{1}{2}$ cubic feet of sand to 5 cubic feet of crushed rock or screened gravel, or 1 part of ce-



Concrete Hog-House Floor With Wallow at End.

concrete floors do not harbor disease germs and can be easily cleaned and disinfected. Properly built and cared for, they are not damp and do not cause rheumatism.

Planning and Laying Out Floor.
The first step in building the floor is to remove all manure and other foreign matter and then to grade the surface of the ground. If needed, lay all water pipes and the drains necessary for keeping the ground dry, for carrying off waste water and for conducting the liquids to the manure pit. Such earth filling as may be necessary must be dampened and thoroughly tamped. This work should be done as long as possible before building the floor. Keep the concrete from direct contact with the earth by covering the entire surface of the leveled-off ground with six to eight inches of coarse crushed rock or screened gravel.

For grading the surface of the floors use a carpenter's spirit level (or a water level) and a chalk line. A four-inch thickness of concrete is sufficient. Slope the floor one-eighth inch per foot in such direction that the rain or scrub water will cause the least inconvenience. For poultry houses this will usually be toward the

ment to 5 parts of bank-run gravel. These materials are measured on the basis that 1 bag of cement (loose) equals 1 cubic foot. Mix them thoroughly on a tight wooden platform (never on the ground) and use enough water to make the concrete "quaky."

Lay the floor in a manner similar to sidewalk construction. If the sand and rock are first-class in quality, no finishing mortar is required. Such a mortar is generally mixed 1 part cement to 2 parts sand and is applied (1 inch in thickness) to the 3-inch concrete base before the latter has begun to set. To provide good footing for animals, the floor should be finished merely with a wooden float. A steel-trowel finish is entirely too smooth and, if made, should be roughened with a stable broom. Should removable wooden or gas pipe partitions be used, make mortises for them in the floor at the proper points by inserting short lengths of gas pipe or drain tile, or by tamping the concrete around tapering greased wooden cores, which must be withdrawn as soon as the concrete has stiffened.

With the proportions given above, 4 bags of cement (1 barrel), $\frac{1}{2}$ cubic yard of sand and $\frac{1}{2}$ cubic yard of crushed rock will lay a section of floor

8 feet square by 4 inches thick. The cost for the materials alone will be about \$2.50. As to the labor, ordinary farm help can do the work very well.

Proper Care of Animals and Floor.

Regardless of the material used for the floor, a certain amount of covering must be provided for floors of houses for poultry, sheep and hogs. Floors of poultry houses should be covered with a layer of sand or litter. The floor of the sleeping quarters of a hog house should be provided with a removable slatted wooden platform, which must be well supplied with bedding of straw or litter. Likewise, the floor of sheep sheds should be kept bedded especially during the lambing season.

Concrete floors are the cheapest as they never have to be repaired or replaced. Moreover, they can be flushed out with a hose or thoroughly disinfected with oil or other substances without injury to the concrete. They are effective in aiding the prevention of cholera and foot-rot. On account of their sanitary qualities they greatly increase the profits of poultry, sheep and hog raising.

TO BEGIN HOG-CHOLERA WAR.

The Bureau of Animal Industry of the United States Department of Agriculture, which has selected Pettis as one of three counties in which to demonstrate the possibility of eradicating hog cholera in Missouri, has arranged a series of sixteen meetings in the county beginning at Beaman July 28 and ending at Flat Creek, August 13. These are only preliminary meetings to explain and outline the work.

The campaign is to last two years and the expense will be borne by the Government. Twenty-five thousand dollars has been appropriated for the work in this county alone.

S. M. Jordan, manager of the Pettis bureau, said recently he considered this one of the most important movements ever inaugurated in the county. It means a saving of thousands of dollars each year to the farmers.

CANTALOUPE HIS FORTUNE.

L. W. Galbraith, whose farm is on the Cache River, near Villa Ridge, south of DuQuoin, Ill., claims to be the champion cantaloupe raiser of the United States, and is prepared to make good his boast. On a four-acre farm Galbraith has realized \$4,000 this season. It is doubtful if any other crop will yield such handsome returns to the acre. Galbraith has been a farmer for twenty-five years, and for the last several years his profits from cantaloupes have amounted to thousands of dollars. He is convinced that his little melon farm is without an equal in the United States in point of returns on a small investment.

SEVEN SOIL EXPERTS ADVISE CENTRAL ILLINOIS FARMERS.

Illinois farmers are rapidly adding to the number of soil experts and county farm advisers. Central Illinois is now able to boast of seven, as follows: Livingston County, Roy C. Bishop; Champaign County, C. H. Oathout; Kankakee County, J. S. Collier; Will County, Frank C. Granitis; Tazewell County, E. C. Robbins; McHenry County, D. F. James, and Peoria County, Henry Prueett. These seven at a meeting held this week, decided to organize for mutual assistance and cooperation.

It is proposed to arrange a short course upon some particular topic and give each county adviser an opportunity to give his views and the results of his investigations and experimenting. The subject of hog cholera is pertinent just now, this disease being prevalent in a number of counties. A demonstration to be given at Springfield on September 1 by the state veterinarian, will be attended by all of the Central Illinois advisers.

The federal government is so much interested in the movement among the Illinois farmers that it sent C. B. Smith from Washington to meet with the county representatives and discuss various problems of soil testing and fertilization. Smith is at the head of the department of farm management. In an address before the meeting of experts, Mr. Smith stated that there are now 140 counties of the United States employing soil experts and which are being assisted by the government. Minnesota has twenty-five and Indiana 30. It was announced that De Kalb County is soon to secure an adviser, the Board of Supervisors appropriating \$2000 to assist in the expense of maintenance. Livingston, Sangamon and Kane counties have just concluded a clover and alfalfa tour of the respective districts, experts explaining the advantages to be derived from these crops.

C. H. Oathout, the new leader in Champaign County, will receive a salary of \$3,600 per annum and has been engaged for three years. For four years past he has managed the 800-acre farm of C. P. Meharry near Tolono. He graduated from the Agricultural College of the University of Illinois in 1907 and had charge of the experimental fields in Central Illinois for some years.

POLISH ACTIVITY.

The wonderful tenacity of national life exemplified for decades by the Poles shows no signs of flagging, a special delegation having been sent to London to lay their grievances before the Conference of ambassadors having the Balkan troubles up for settlement. There are some 23,000,000 Poles prepared to assist with money. These brave people deserve a better fate.

The Pig Pen

BUYING AND BREEDING PIGS.

Editor RURAL WORLD: In my last article I gave my experience in buying a cull boar just to get the pedigree and to get into a high-priced family of hogs, and as that little deal "broke" me of "sucking eggs." I found myself with some good sows and no boar, and with my faith considerably shaken in the breeders, and as it was past breeding season I began 'to try to get in touch with some good breeder that had a tried herd boar that he could not use to advantage in his herd, and found Mac's Farm Sensation 138521. He was in the hands of an Iowa breeder. I wrote for price and full description, and was told that this boar had won

vantages in buying this kind; the breeder who depend on turning his boar in lot with sows and trusting to "luck" to get them with pig should avoid these big fellows for they are not as active as a young hog and there is danger of breaking your sows down, and the big hog is a failure turned in the herd in hot weather. While I use a breeding crate, I often fail to get a cover when the weather is hot, but for November breeding have no trouble as weather is cooler and I try to reduce the boar in flesh during hot weather and then have him thriving by fall and in good shape for heavy work. I only give one good service and then separate them, and make a limit of two services a day, and I believe the results are better.

Another very important feature in securing good sized litters is the condition of the sow at breeding time.



Mac's Farm Sensation. Owned by Ben T. Prigmore, Sweet Springs, Mo.

first premium at Iowa and second at Nebraska State Fairs and that his boar pig had won first at both places and first and Jr Champion at Des Moines in 1911, and that his sow pig had been second all around, and that his litters had always run from 8 to 14 pigs, and that his owner was going to keep the son of this boar to head his herd and would have to either sell or castrate Mac's Farm Sensation, he made me the low price of \$35 on him owing to the fact that I was buying out of season and express would be high. Now it is very probable that if I had asked for a price on this fellow when he walked out of the show ring with the blue that I would have been asked \$150.00 for him, and while the price and description seemed a little too good to be true, as he was only a two-year-old he was just in his prime, I bought the hog, and when he arrived I was more than pleased with him and I have him yet and will keep him as long as he breeds like he has been doing. He measures six feet four inches from nose to root of tail, or an extreme length from nose to tip of bush of tail of eight feet and one inch, has a heart girth of five feet three inches, will weigh about 700 lbs. in medium flesh, could be made to weigh 1000 lbs. He stands three feet high and carries his weight on an eighth inch bone.

Any breeder that has a few pure bred sows and can find one of these tried boars that is not too old and one that can be used in a breeding crate will do well to buy this kind for they are worth more than the untried hog. However, there is some disad-

too many breeders get their sows fat before breeding time and then reduce them and breed while they are being reduced in flesh. This is a serious mistake. The general opinion of breeders is that nature fixes as many pigs in a sow as her condition at breeding time would indicate that she can take care of. If a sow is thin in flesh but has been improving rapidly for two or three weeks previous to breeding and you will keep her doing good after being bred for a while until the litter is set, you will have much better results than if you had tried to reduce at breeding time, and if a sow is fat at breeding time it is much better to keep her gaining until bred and litter set, and then reduce her until three or four weeks before farrowing time, then bring her up in flesh, not with corn alone, but with corn combined with a pretty strong protein diet.

One reason for gilts farrowing small litters is that they are let run with the fattening hogs until just before time to breed, then taken away from the feed as they are considered too fat to breed and while being reduced are bred, then we say we could not expect much from a gilt, just try one by having her thin six weeks before breeding time, then begin to push her slow at first, but have her almost on full feed when bred and keep her that way for two weeks after, and watch the difference; if you have a good boar that is in the right condition you will get a good litter.

From now until new corn is ready to shell is a very important time with the spring pigs. This is a very busy time with farmers and a great many neglect to see that their hogs get good water to drink and that the lice are kept off of them. Let a growing pig drink filthy water and be covered with lice all summer and probably not very well fed and its constitution is so poisoned by the filth, and vitality so weakened by lack of feed and a sur-

plus of lice, then throw the green corn to it pretty freely, and you are very liable to have some sick hogs. But, of course it is easy to say that your neighbor's dog carried it to you. There are hundreds of so-called "neighbor's dogs" bred in these mud holes in our hog lots. I do not keep a dog and once in a while turn the Remington loose on one, but they do not carry all the hog cholera that they get credit for.

This is a good time to start to feeding some good worm medicine and watch the sleeping places if they are dusty: either fasten the hogs out or clean the beds out. The best method I have ever used to keep dust down is to use crude oil. This will keep the dust down and will make it more unpleasant for the lice, and I use crude oil pretty freely in the wallow holes. It is the cheapest hog dip I can get and I think it is the best. In buying it, insist on getting CRUDE OIL and not the "split" oil or settling. Some traveling oil men sell so-called crude oil to farmers that has had the gasoline and most of the oil taken out of it, so we only get the dregs out of the bottom of what HAS BEEN a tank of crude oil. These dregs are so thick that it will not run through a sprinkler very good in hot weather, and in winter you have to heat it to get it to run, but the pure crude oil will run through a sprinkler as freely as water even in the coldest of weather. I have had both kinds. We have to pay about three dollars more for a barrel of crude oil than we should, so we are entitled to what we buy, and in the future they will have to "show me." However, if you have a barrel of thick oil you can make it better by adding good oil.

BEN T. PRIGMORE.

ABOUT CHOLERA HOGS.

At last session of Missouri Legislature the law regarding the disposal of hogs dying from cholera was changed. Heretofore it was necessary to either bury or burn the hogs; now the law says all hogs dying of cholera must be burned, and the party must give warning by placing yellow flags at his gate. The new section of the law reads as follows: "Section 4868. The owners of swine that die of any disease shall dispose of the carcasses within twenty-four hours after they die by completely burning upon the premises where they have died, unless the state veterinarian or his deputy, shall specifically describe some other manner in which the carcasses may be disposed of. It shall be the duty of owners of swine that may be sick of any fatal disease to give a danger warning by placing yellow flags in size at least 10x12 inches at all gates or other openings into his premises."

A good pasture for hogs can easily be provided by using temporary and quick-growing crops, such as rape, oats, cowpeas, etc. These crops should be planted in different fields, and one pastured while another is growing. The inconvenience of clover dying can be overcome by proper use of quick-growing crops.

When on a blue grass or timothy pasture young hogs do not receive the proper food nutrients to properly balance a ration of corn alone. For hogs under six months of age, to give the best returns on a pasture of this kind, they should receive in addition to their corn a limited amount of some kind of nitrogenous feed, such as shorts, linseed oil meal, tankage, meat meal, etc. Hogs more than six months old make less rapid gains when fed corn alone than when fed corn and a supplement in connection with bluegrass or timothy, but the gains made from the former ration are usually as cheap as from the latter.

The Shepherd

HURDLES FOR EWES AT LAMING TIME.

If it is a flock of any size, it is a safe plan for the shepherd to provide separate small pens for the ewes until the lambs are a few days old and have gained enough strength to get around well. If allowed to lamb with the rest of the flock, the ewes are liable to try to get away from the rest of the sheep and the chances are that some lambs will be dropped where there is little or no shelter and when this occurs in bad stormy weather, the youngsters soon become chilled and die before they are able to suckle. By inspecting the ewes every day the shepherd can easily detect the most forward ewes and they may be separated from the remainder of the flock and kept some place where there is no danger of the lamb freezing should the shepherd not be there to look after it. The mother and lamb may now be put in a small pen made in one corner or along one side of the regular shed. This pen need not be over 4 feet. Here the ewe will not fret about the lamb and it will be in no danger whatever from wandering away and getting chilled from lack of milk. These small pens are also useful in cases where ewes disown their lambs. They may be tied or the pen made narrow enough that the ewe cannot turn around and fight the lamb.

Some flock owners make these pens by hinging two short hurdles together at one end. The hurdles should be about 5 feet long and not over 2 feet 6 inches high. When hinged together they make a V-shaped pen which has the shed wall for the third side. These have the advantage of being easily constructed and very easily moved. When through using this hinged pen, it may be folded together and kept in some convenient place about the shed where it will not be in the way.—V. A. Place, Ill. College of Agriculture.

FACTS ABOUT MILCH GOATS.

Farmers who like to add new lines to their variety farming would do well to inform themselves as to the profits to be made on milch goats. Backed by the government, under whose protection several importations of Swiss stock have been made, there is a growing interest in this new industry which promises large returns, especially to the pioneers in the business.

The following items are useful: Goats do not decrease the food of other animals if there are uplands where the other animals cannot climb, or if there is any kind of browse or cuttings to be had. They do well on any kind of feed that is advantageous to cud chewers, and they thrive particularly on alfalfa, either fresh or cured as hay. They can be pastured with all kinds of stock except hogs.

Goats' milk is alkaline in reaction, and cow's milk is acid. Compared again to cow's milk, it has a larger percentage of butter fat, and the cream globules are smaller and more numerous, and it is also more digestible. Goats' milk has the endorsement of scientists and leading physicians, both in this country and in Europe, as the purest form of milk, and the best substitute for mother's milk for babies.—May Blossom Lindsey.

THE EWE'S FEED.

A warm bran mash is a good thing to feed a ewe right away after her lamb has been born. This tends to help the flow of milk.

A small ad may bear the message you would deliver to the man you wish to reach. Try one at 1 cent a word.

Berkshire Sows.

We are offering some of our best herd sows at half their cost. Bred to Ideal's Emperor. Also some fine gilts. Fifty fine Columbian Wyandotte hens at half price. Fancy White and Brown Leghorn cockerels cheap. E. J. REED. OBLONG, ILL.

Mule-foot Hogs, Shetland Ponies and High-yielding Seed Corn. Danlap, Williamsport, O., Box 474.

The Dairy

PURE BREEDS IN THE DAIRY.

I have found from experience that a very small percentage of heifers raised from the best milking scrub cows are as good as their mothers, even though the sire may be pure bred. This applies to the first cross. As subsequent crosses are made, providing very good bulls are used and one breed is adhered to, the grades will increase in productiveness in proportion to the amount of pure blood they carry.

When a man says that a good grade is as good to milk as a pure bred, I say "Yes;" but the only way to get that good grade is to raise her, and that will take at least three generations of careful breeding and the use of very good sires and at the end of ten or fifteen years you still have a grade which if you wish to sell, will bring the common grade price as you have nothing to show but your bare word as to how good the cow is bred, whereas for but a slight increase in the initial cost of the first dam and with the same careful breeding for the three generations you will have a purebred cow that will sell for two or three times as much as the grade for her pedigree will show just how well she is bred. If advantage is taken of the advanced registry at a slight extra cost, it will show just how good a producer the cow and her dams are and she will sell herself without your word for anything.

Some five years ago, a young man started dairying with a good scrub dairy but became dissatisfied and gradually stocked up with a few purebred Holstein heifers. Today these two and three-year-old heifers are milking from 50 to 60 pounds per day and when fresh milked over 60 to 70 pounds per day with first and second calves. You could not make that young man believe that scrubs are just as good for experience has taught him better. The only thing he is kicking about is that he didn't start with pure breeds at first and the reason he didn't was because he at first took advice of pessimists who had been and are still and probably always will be milking scrub cows.—O. L. Prindle, Lorain Co., O.

METALLIC FLAVOR IN BUTTER.

Economic conditions make it necessary at present to hold butter in storage from the summer season, when it is plentiful, to the winter season, when it is scarce. If the butter is properly made this can be done without materially injuring its quality. It often occurs, however, that butter which has been held in storage for some months develops disagreeable flavors that greatly lessen its value. These bad flavors that will often pass unnoticed when the butter is fresh may become so serious a defect after three or four months in storage as to render the butter almost unsalable. The chemical changes which cause these bad flavors are often too small to be detected by the ordinary analytical methods of the laboratory, but the senses of smell and taste are far more delicate, and as soon as bad flavors are detected by them the value of the product is lessened, says Ohio Farmer.

Some metals either cause or greatly accelerate certain bad flavors in butter, although most of the experiments along this line have not included storage butters. Recently the Bureau of Animal Industry has reported that the presence of very small amounts of iron in cream causes certain undesirable flavors to increase in intensity during storage. These flavors are often designated by butter

experts as "metallics," "oily," or "fishy." The injurious effect of iron was found by adding iron in known quantities, varying from 1 to 500 parts, to a million parts of cream. The butter made from such cream was compared with that made from cream where all precautions were taken to avoid any undue contact with iron during the whole process of butter making. The butter was stored at 6 to 10 degs. F., and the quality of the butter was scored a few days after making, the samples to which iron had been added scored lower than the butter made from samples which contained no iron.

Butter was also made from cream which had stood in rusty cans, and in every case this butter had a peculiar taste and was easily picked out from all other samples. The buttermilk also had a decided metallic taste.

The influence of copper on the flavor of butter was studied. It was found that copper, even in small quantities, seemed to cause more marked changes of flavor in butter than did the iron, with a decided tendency toward a fishy flavor in storage. Two experiments showed very plainly the harmful effect of using poorly tinned pasteurizers, even though the cream came in contact with the copper surface for only a few seconds, for, aside from this, all other conditions were exactly alike during the complete process of butter manufacture.

This work shows that if cream is kept in rusty cans or comes in contact with iron or copper at any time during the process of butter making, it may take up iron or copper from rusty cans, exposed bolt heads, or other metal parts of pasteurizers or churning, in sufficient quantities to affect the flavor of storage butter. Though there is nothing to show that the nature of the flavor is appreciably changed, it does demonstrate very clearly that the rate of development of the undesirable flavor is greatly accelerated during storage by very small quantities of either iron or copper.

AN ERA OF SPECIALTY.

This is an era of specializing in the professions and in commercial life and specializing is on the increase upon the farm. Men are giving deep thought to the farm problems that confront them, studying soil conditions in a more intelligent manner than ever before as to what is best for them to undertake to produce on their particular piece of ground. There is one great special question before the American farmer, today, that he must solve for his own sake as well as for the balance of the population; that is live stock production. The tremendous shortage of meat and dairy products at the present time in this country and the wide range between production and growth of population make it a profitable proposition to undertake, as we cannot hope for many years to again equalize supply and demand.

The National Dairy Show at Chicago, October 23rd to November 1st, offers a splendid chance to inform yourselves on the dairy question, as it treats of everything pertaining to dairying in most easy and comprehensive manner and the farmer should avail himself of the opportunity to go over this branch of industry as it offers a splendid special field of profit to the farm.

New alfalfa hay is selling here at retail at \$17.50 per ton. Mr. Williams received a ton the other day. It is the best feed for milk cows.—Montgomery (Mo.) Standard.

Don't forget the Want Department of the RURAL WORLD (one cent a word) when you have something to sell the farmer or stockman. The little ads. bring results.

Cattle

CO-OPERATIVE LIVE STOCK IMPROVEMENT.

Last week we published an article on "The Advantages of Live Stock on the Average Farm," by John J. Ferguson of Chicago in an address before the second annual convention of the National Association of Managers of Farmers Co-Operative Companies, and this article completes the address:

A system of Co-operative Live Stock Improvement has been successfully launched by the Canadian Department of Agriculture as indicated in a letter from Mr. John Bright, Canadian Live Stock Commissioner, June 13th, with information specially prepared as follows:

Realizing that inability to secure the use of well-bred animals is at the present time one of the greatest difficulties standing in the way of live stock development in many parts of Canada, particularly in the newly settled districts, the Dominion Department of Agriculture, through the Live Stock Branch, is this year undertaking a widespread distribution of pure-bred stallions, bulls, rams and boars. The original cost of the animals will be borne by the Department and they will be placed in the hands of such local organizations as agree to the conditions governing the distribution. In a word, these sires will remain the property of the Department, but the local associations will be responsible for their proper maintenance and management under the general supervision of officers of the Live Stock Branch. In the case of stallions, the members of the associations will also be required to pay a fee covering an annual insurance premium.

All animals distributed will be bought from home breeders and will be Canadian bred. As far as possible they will be purchased in the province in which they are to be placed. In this way the Canadian breeders will receive encouragement and their market will be increased not only directly but also indirectly through the emphasis given throughout the country to the value of pure-bred sires. It may be added that it is not the intention to place the animals in districts where suitable male animals of the same class are already owned by private individuals. The aim is rather to aid sections where pure-bred sires are lacking and as well to encourage new communities in following a proper and intelligent system of breeding.

All bulls to be distributed will be purchased subject to the tuberculin test and only stallions which have passed a rigid veterinary inspection for soundness will be selected.

In order to take advantage of this form of assistance it is required that a number of farmers in any section shall undertake the organization of a local association in whose hands such sires as are loaned thereto may be placed. To facilitate the work and to assist those interested in completing an organization provision is made for an officer of the branch to visit the districts from which applications are received.

Already this movement on the part of Dominion authorities has stimulated greatly increased activity among Canadian stockmen.

The system instituted by the Ontario Provincial Government is indicated in a personal letter from W. B. Roadhouse, Deputy Minister of Agriculture:

I beg to acknowledge yours of the 10th inst. in reference to the experience of this Department in the distribution of pure-bred sires and the encouragement of community breeding. I am very glad to give you all the information available in reference to our experience as far as we have gone.

About a year ago we announced a plan along these lines for the encour-

PURE-BRED REGISTERED HOLSTEIN CATTLE
The Greatest Dairy Breed.
Send for FREE Illustrates
Booklets.
Holstein-Friesian Association,
Box 122, Brattleboro, Vt.



agement of the live stock industry in the newer settled districts of what is known as New Ontario. The area was divided into six districts, and it was announced that we should be prepared to form four live stock associations in each of these districts. To each association with a minimum of twelve members we offered, free of charge, 5 rams, 2 boars or a bull. The association was called upon to make its own arrangements for taking care of the animals thus placed at their disposal.

The plan immediately attracted great interest and the number of associations was very quickly reached, in fact, some thirty associations have been organized in all these districts, and we have had a considerable demand from other points for similar organizations. During the past few months we have forwarded to the associations the following number of animals: 28 bulls, 15 rams, 2 boars. These were mainly shipped this spring, and consequently, as you will readily understand, it is yet too early to have any definite information as to the further working of the plan. The idea was to assist the settler to get interested in the right types and classes of live stock, and also to develop community breeding, and there are many indications that both these purposes will be accomplished to a very considerable degree.

Since this plan has been started, the Federal Government has adopted a similar scheme by which they will assist organizations in all parts of Canada by placing at their disposal male animals, including stallions in addition to those included in our associations. They are now proceeding with their organizations, which will of course be largely confined to those districts which have not been supplied by private enterprises.

In addition to the plans above outlined, there are a number of cases in the province where stallions have been purchased co-operatively and by syndicates, and these, too, I believe, have had a very beneficial effect.

If there is any further information which we can place at your disposal, we shall be very glad to do so.

While the governments of Canada are unusually paternal in their attitude, there are several points in the Canadian system which may well be noted by this convention and carried back to the country.

From our knowledge of the business we are satisfied you will be perfectly safe in using your best efforts to stimulate co-operative live stock improvement over the country. Live stock prices may not and probably will not remain at their present high levels, but if they drop the prices for grain and coarse feeds will take a corresponding drop so that the scale of live stock profits would still be very satisfactory.

CATTLE AT THE PANAMA-PACIFIC EXPOSITION.

American Hereford Cattle Breeders' Association has set aside an initial fund of \$1,500 to be applied toward supplemental premiums for San Francisco in 1915. They expect to have a like amount to set aside in 1914 and again in 1915.

The American Shorthorn Breeders' Association has taken preliminary action, but has not set a definite amount as its supplemental premium offering. In view of the great field for the use of beef producing blood in the west and in the new countries that will be represented at San Francisco by purchasers in 1915, it is expected that the Association will offer premiums at least equal to those given at the St. Louis World's Fair.

ST. LOUIS NATIONAL STOCK YARDS.

N. C. Hopson, of Linn County, Mo., marketed one load of hogs Thursday, being represented by Blakely-Sanders-Mann Commission Co.

W. L. Goodbar, an Oklahoma shipper, was at the Stock Yards Thursday with a consignment of cattle and hogs which were sold by Rafferty Com. Co. at satisfactory prices.

J. P. Freemeyer, of Coatsville, Mo., came in Tuesday with one load of 813-pound yearling steers, which were sold at \$8.50 per cwt. by Evans-Snider-Buel Commission Co.

Meadows & Sweeney, of Pattonsburg, Mo., consigned to the Moody Commission Co. two loads of hogs Monday, which which were sold at \$8.40, the top of the market.

A. M. Page, of Christian County, Mo., was on the market Monday with 22 steers, averaging 1,168 pounds, which were sold by the Henry Commission Co. at a satisfactory price.

O. F. Ellis, of Audrain County, Mo., shipped in 18 head 1,302-pound steers to the National Stock Yards Monday which were sold by Fry-Hanna & Harrison for \$8.15 per hundred pounds.

Sharp & Kinkead, cattle shippers from Vernon County, Mo., were represented on the Stock Yards market Thursday with a load of cattle consigned to Blakely-Sanders-Mann Commission Co.

Dinkley & Ray, of Pettis County, Mo., shipped in two loads of cattle Monday, averaging 1,144 pounds which were handled by Cassidy-Southwestern Com. Co., at prices that pleased the shippers.

Haralson Bros., of Vernon County, Mo., shipped in 41 heifers Monday, averaging 719 pounds, which were sold by Nally-Wells Com. Co. at \$8.75, the highest price paid for heifers on the market this year.

S. G. Cherry, Eldorado Springs, Mo., shipped a load of hogs to the National Stock Yards market Friday. His hogs were consigned to Blakely-Sanders-Mann Commission Co., who sold them at satisfactory prices.

G. H. Huffman, of Johnson County, Ill., was represented on the market at the National Stock Yards with a consignment of cattle, hogs and sheep, which were sold by Rafferty Commission Co. at good prices.

Miller & Hart, of Okmulkee, Okla., shipped in 46 head Oklahoma steers of their own feeding last week. The cattle averaged 1,143 pounds and sold for \$7.70. Evans-Snider-Buel Commission Co. handled the consignment.

D. L. Stark, of Cooper County, Mo., was on the market Monday with one load of cattle weighing 1,210 each, selling at \$8.60 per hundred pounds. Mr. Stark was represented in the sale by Cassidy-Southwestern Com. Co.

Mr. S. T. Booth of the Union Live Stock Com. Co., bought this week 100 cows for Dr. Dunaway of Scott County, Mo.; 100 cows for E. L. Brown, Mississippi County, Mo., and 100 cows for Louis Hinkle of Scott County, Mo.

Wm. Weaver, of Moniteau County, Mo., a prosperous farmer and feeder, came in to market Wednesday with 39 mixed steers and heifers which were sold by the Moody Commission Co. at \$8.30. Mr. Weaver raises Poll-Angus cattle.

J. V. Denny, of Jefferson County, Mo., accompanied a shipment of three cars of cattle to the National Stock Yards market last week, which he consigned to Smith Bros. & Sparks Commission Co. Mr. Denny is a prosperous farmer and rancher.

T. B. Leach, a well-known farmer of St. Elmo, Ill., was at the National

Stock Yards Tuesday with one load of 1,270-pound steers, selling at \$8.70. He was represented by Evans-Snider-Buel Commission Co. This bunch of cattle was Mr. Leach's own feeding.

Mr. William Black of Stoddard County, Mo., was represented on the market last Friday with one load of cattle, which was sold by Smith Bros. & Sparks Com. Co. Mr. Black, who was recently married, was accompanied by his accomplished wife.

J. W. & J. L. Henry, of Morgan Co. Ill., were represented on the market Monday with 20 head of steers averaging 1,277 pounds each, which were sold by the Henry Commission Co., at \$8.50 per hundred pounds, within 10c of the top of market for that day.

J. E. Moore, a Callaway County, Mo., feeder, was on the market last Wednesday with 60 head of cattle averaging 1,361 pounds for which he realized \$8.55 per cwt. These steers were his own feeding. He was represented by the Moody Commission Co.,

A. B. Swaney, of Burlington Junction, Mo., was on the market Wednesday with one car yearling steers, averaging 954 pounds, for which they realized \$8.35 per hundred pounds. Mr. Swaney was represented in the sale by Woodson & Fennewald Live Stock Commission Co.

D. S. and F. J. Cantrell, Wright County, Mo., shippers, were represented on the National Stock Yards market last Thursday with two loads of cattle. The cattle was sold by Blakely-Sanders-Mann Commission Co. The Messrs. Cantrell are regular shippers to this market.

Tim Waters, of Ralls County, Mo., was at the National Stock Yards Monday with mixed load of cattle, including nine steers averaging 1,144 pounds which brought \$8.50 per cwt. Mr. Waters was well pleased with his returns for his cattle which were sold by Fry-Hanna & Harrison.

Bomgardner & Clark of Unionville, Mo., were on the St. Louis National Stock Yards market Friday with one car of hogs, averaging 213 pounds, which were sold by the Keys Commission Company at \$9.35 per hundred pounds, within 2½ cents of the extreme top of the market for that day.

R. Andrews, of Fulton County, Ill., was on the market Friday with a consignment of 73 hogs, averaging 195 pounds, which were sold by Dimmitt-Caudle-Smith Commission Company for \$9.37½, the extreme top of the market. This was the only lot of hogs that sold on the market Friday at that figure.

Eidson, Webster & Sanders Washington County, Ark., shippers, were at the National Stock Yards with a double deck of sheep Monday, which were sold at satisfactory prices by Cassidy-Southwestern Commission Co. These gentlemen are big shippers and supporters of the National Stock Yards market.

E. F. Henderson, of Chariton County, Mo., sold a load of hogs on the National Stock Yards market Wednesday, averaging 300 pounds, at the extreme top of the market on that day, \$9.40. This is an outside sale for these weights, and he was very well pleased with the sale by Milton-Marshall Commission Co.

T. H. Abbingdon, cattle shipper, of Audrain County, Mo., was on the National Stock Yards market Tuesday with three loads of sheep and lambs, which were sold at a good price. Mr. Abbingdon returned Thursday with a load of cattle, averaging 800 pounds, which were sold for \$7.25 per cwt.

The consignments were handled by Woodson & Fennewald Live Stock Commission Co.

J. D. Underwood & Son, of Callaway County, Mo., was on the market at the National Stock Yards with two loads of cattle, averaging 1,198 pounds, which sold for \$8.40 per cwt. They also brought in one load of hogs and two loads of lambs. The shipments were sold by Woodson & Fennewald Live Stock Commission Co.

J. S. Carter, of Fulton County, Ill., contributed a car of hogs to the market last Wednesday, averaging 201 pounds, which sold at the extreme top. The sale was made by Milton-Marshall Live Stock Commission Company. Mr. Carter is a regular shipper of Fulton County, and is always on the market with one or two cars each week.

Childers & Forbis, of Christian County, Mo., had a load of hogs on the market last Wednesday, which averaged 227 pounds and sold at \$9.40, the top of the market on this day. Messrs. Childers & Forbis are in Kansas City territory, and were well pleased with results obtained through Milton-Marshall Live Stock Commission Co., who sold the load of hogs.

Judge W. C. Lambert, of Scott County, Mo., purchased a mixed load of steers and heifers averaging 476 pounds, costing him \$5.05, at the National Stock Yards, which are to be put on grass and finished on corn and returned to the market. Judge Lambert is a veteran in the business and is an extensive dealer in grain throughout his county.

Truesdale & Adams, of Randolph County, Mo., had 21 steers averaging 1,247 pounds on the market Wednesday, which brought \$8.20; also 30 steers, averaging 815 pounds, which sold for \$8.50. They also brought in one load of hogs which brought \$9.40. This stock was all their own feeding. Moody Commission Co. handled the sale of these consignments.

Crouch, Wilson & Co., Bellbuckle, Tenn., the biggest shippers of sheep and lambs of any firm in Tennessee, have had from 75 to 100 cars on this market this season and never failed to top the market. Moody Commission Company, who handle all their shipments, received a letter from them this week complimenting the way

business is transacted at the St. Louis National Stock Yards.

R. R. Cruzan, a well-known farmer and feeder of Monroe County, Mo., accompanied a shipment of cattle to the Stock Yards Monday, including 10 yearlings, averaging 842 lbs., selling for \$8.50 per cwt., within 10c of top of yearling market. Mr. Cruzan also had two heavy steers in the lot averaging 1,415 lbs. which sold for \$8.75, top of heavy steer market. The cattle was sold by the Moody Commission Co.

F. O. Link, of Callaway County, Mo., was on the market at the National Stock Yards Tuesday with a load of 1,411-pound steers which sold for \$8.60. Mr. Link was also in with a second shipment Wednesday of two loads of steers which averaged 1,317 pounds and sold for \$8.85, the top of the market. These three loads of cattle were sold by Evans-Snider-Buel Commission Company to Armour & Co.

A. N. Dey, an Audrain County, Mo., feeder, was on the market Monday with a load of cattle he bought at the Stock Yards five months ago which he shipped out to his farm and fattened for market. The steers gained 70 pounds each per month. They were fed silage and cotton cake and then finished on corn and Missouri blue grass. The cattle averaged 1,140 lbs. and were sold at \$8.15 per cwt. Fry-Hanna & Harrison Com. Co. handled the consignment for Mr. Dey.

Brown & Lee, of Chariton County, Mo., two of the largest shippers in the county, were on the market with one load of hogs, two loads of cattle and one load of sheep to Milton-Marshall Live Stock Commission Co., who secured the top of the market on the hogs averaging 192 pounds. The steers sold at \$8.60, within 10 cents of the extreme top, averaging 1,263 pounds. Lambs sold at the extreme top of the market, \$7.10, averaging 62 pounds. It is nothing unusual for these shippers to be on the market with four or five cars at a time.

Ed Scott, of Morgan County, Ill., was at the National Stock Yards Thursday with two loads of cattle; one load, averaging 956 pounds, sold for \$8.60; the other load, averaging 967 pounds, sold for \$8.50. The cattle were sold for him by Simon, Wiggs & Co., and Mr. Scott was very well sat-

The Size of the Check

Returned the Shipper of Live Stock is the most important item in the deal. We aim to make the Check larger than our competitors can.

Personal attention given to every consignment. Every Salesman a member of the firm. If you desire the services of sober, intelligent, successful business men, consign to us.

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COMMISSION CO.
National Stock Yards, Illinois**

Pope Dimmitt, Pres't
S. P. Smith, V.-P.
C. B. Caudle, Secy.
W. R. Huitt, Treas.

References: National Stock Yards
National Bank and our many customers.

isfied with his returns. Mr. Scott is a scientific farmer and feeder and takes a great deal of interest in farmers' institute and experimental work, and is a close student of all things pertaining to the advancement of live stock raising and farming in his section.

Speaking of the horse market last week Campbell & Reid and Western Sale Stables Co. say: "We have had about the usual run of horses for this season of the year, and the majority of them have been of poor quality. All of the good, rugged, full-aged work horses have sold readily and at good prices. We have always been able to sell a good many of the cheaper grades of work horses at very fair prices, but in order to get a satisfactory price horses must be big enough to work. There is very little demand for Southerners or small horses of any kind. We are always able to sell them at a price, but can't make the shipper money. We expect a good trade on them later, and think it wise for the shipper to leave Southerners in the country at present. As for mules, the medium, light weight, thin, green and common kinds are neglected and not wanted."

COW-TESTING WORK GROWING RAPIDLY.

Five years ago, in 1908, only four cows were entered in Ohio in the advanced registry. During the season just past, from May, 1912, to 1913, 1202 cows have been tested and produced the required amount of butterfat to become eligible for the registry of merit. During this time 691 Holsteins have been entered in the seven-day test and 70 in the yearly test. Among the other breeds, 185 Guernseys, 147 Jerseys, 81 Ayrshires and 18 Brown Swiss have been entered. Fifty-eight testers have been employed at different times to do the work. The largest part of this work is being done in the northeastern part of the state, 75 per cent of the cows tested coming from this district. Fifteen per cent come from the northwestern part, 5 per cent from the central, and 5 per cent in the southwestern section. No testing has as yet been done in the southeast.

In commenting on this rapid growth, Prof. Oscar Erf of the College of Agriculture, under whose direction the testing has been done, says: "Farmers are taking up the advanced registry testing because they are learning that they cannot get high prices for their cows if they do not have a record. The work done so far has meant thousands of dollars to those farmers who have taken it up. It would probably average \$250 a head if all cows were considered."

In addition, interest has gradually increased among farmers. Breeders have worked to increase capacity and in doing this have learned the finer points of feeding and breeding.

Most of the testing is done from October to May. As many as 12 cows can be handled by one tester if the cows are milked but twice a day. Eight can be tested if milking is done three times and six if four times.

G. B. M. Snyder a few weeks ago brought in a nice bunch of heifers and cows from Illinois, of the Holstein-Priesian breed, and had little trouble in disposing of them to the farmers. He and Adolph Bock brought in 20 more this week and have sold the greater part of them. The following farmers have purchased from this lot: Emanuel Bachman 2, Joseph Huber 3, Armine Schaumburg 2, John H. Melner, Jos. Reiss, Basil Moore and Theo. Renner 1. There were eight males with the last lot. Our farmers are realizing more and more that graded stock pays better than scrub stock and are anxious to raise the standard of their herds.—Perry County Republican.

WEEKLY MARKET REPORT

Cattle and Hogs Steady—Good Grades In Demand—All Grades of Sheep Firm.

Receipts — Monday — Cattle, 7000 head; hogs 4500; sheep, 6000; horses and mules, 600.

CATTLE—Beef supply was moderate. There were a few loads of the good to choice kinds, but again nothing in the strictly prime order. The trade was only fairly active, and considering the small supply, selling was a bit on the draggy order. The good to choice grades were taken at prices which were steady. However, killers were bearish on the medium to plain grades and these kinds moved on a basis which was from a shade to 10c lower, and it was rather slow and mean selling at this loss. Several loads of good quality beefes, including a bunch of white faces, reached a top of \$8.60 and a prime Hereford steer brought \$9. Bulk of the desirable grades cleared in a range of \$8.25 to the top. Medium grades moved mostly in a spread of \$7.25@8.25. Yearlings were in small supply and nothing choice offered. The clearance was good.

On the good to choice heifer grades there was but little change relative to values. Killers were seemingly none too eager to absorb the supply, although generally steady prices prevailed. The medium kinds were slow sellers and a loss of a flat dime prevailed in most of the negotiations on these kinds. A bunch of prime, yearling heifers topped the market at \$8.75 and a few bunches, which also included some steers, sold in a range of \$8@8.50.

There was only a moderate supply of cows and the most desirable grades sold about steady. The medium kinds, however, excepting canners and cutters, were on a weak to shade lower basis.

Total supply of quarantine cattle, 110 car loads. The somewhat moderate supply had a good effect on the tone of the market.

HOGS—Although the supply was extremely light the market was but very little better than Saturday. Good grades sold a shade better, but there was hardly enough improvement to call the trade 5c higher.

Several loads of hogs went at \$9.40, which was the top of the market, while the bulk sold at \$9.20@9.35. The top was not so high as the top in Chicago, but the bulk was much better, as the bulk there went at \$8.80@9.20. The local top was 35c higher than the top in Kansas City and the bulk also sold about 35c higher than the bulk there.

Lights and pigs that had quality found a good active trade as there was a greater demand than there was supply. Best lights under 165 pounds sold at \$9.15@9.35, best grade of pigs under 125 pounds at \$9@9.25, medium kinds at \$8@8.85, fair at \$7.35@7.90, and the common ones at \$6.50@7.25.

SHEEP—A moderate supply, the greater proportion of which consisted of lambs. The market was on a steady basis for all grades of sheep owing to the small number received, but lambs were 15@25c lower and most of them showed the decline of 25c. A few Kentucky lambs were offered, but none from Tennessee that commanded any attention. The lambs out of Missouri averaged pretty good.

One lot of lambs from Kentucky sold at \$7.60, which was the top of the market, while the best natives went at \$7.50. Southwest lambs sold as high as \$7.40. A good grade of killing lambs went to the slaughterers at \$7.25@7.50, medium grades at \$6.50@7.00 and the culs and fair offerings at \$4.50@6.00. Buyers sorted their purchases of lambs pretty deep.

Cattle Department	Office	Hog Department
J. W. Sanders	F. L. Ballard	H. W. Mann
H. B. Sanders	Clara Lynch	Mike Daley
F. F. Hunniger		Sheep Department
W. E. Talkington		D. P. Collins
Geo. Tipton		

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Business Success Demands Efficiency

That's Why We Lead

If you want top sales, and light shrinks, give us your business, as we can assure you. We give our entire time to the Commission Business. All of our firm, also our force is interested only at the National Stock Yards, Illinois. A square deal for everybody.

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Al Keechler

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NATIONAL STOCK YARDS, ILLINOIS.

CONSIGN TO US AND BE ASSURED OF THE HIGHEST MARKET VALUE FOR YOUR CATTLE, HOGS AND SHEEP.

SEED CORN

JOHNSON COUNTY WHITE

We grow it, and only offer what is grown on our own farm, from the very best seed. No one has better seed, and no one can afford to sell good seed cheaper. Prices: Crated ears, \$2.00 per bushel, select shelled, \$2.50 per bushel. A few bushels of Boone County White, same prices. Better order early.

C. D. LYON, R.R. GEORGETOWN, OHIO.

Horticulture

TURNIPS.

By C. D. Lyon.

We at the North and West probably do not appreciate the value of this crop as much as we should, as it is one of the easiest of all crops to grow, and it holds a valuable place in the economy of the farm, on the table, as well as a supplemental ration for stock.

The story is told of an old Scotchman, whose son had returned from college, his head full of facts and figures, and who tried to discourage his father from planting his usual acreage of turnips by saying, "Why, dad, turnips are 87 per cent water." The old man scratched his head, knocked the ashes out of his pipe, and starting afield with the turnip seed said, "That may all be, lad, I dinna ken about it, but it is dom gude water."

In years of May-June, as in the present, a great many farms will have plots of land, large and small, bearing no crops, and these plots may well be sown to turnips during July and even up to August 15, for some experiences of the last few years have shown me that for territory west of the Mississippi River, and even east of that, the 24th of July, wet or dry, is full early for turnip sowing. Some years ago, a hired man of mine had the habit of carrying some turnip seed in his pocket, and of scattering a pinch almost anywhere in the crop fields up to August 25. We had turnips all over the farm that year, and last year, when I failed to get my seed until after August 5, we grew the best lot of turnips we have had in years.

The land should be thoroughly prepared, and while it should be as fine as a garden bed on top, it is not necessary to work it very deep. If the land is not rich it should be made so by the addition of well rotted stable manure, and we have had excellent success on land of only medium fertility by the use of fertilizers. In fact I find that I can grow better turnips by applying some commercial fertilizer strong in potash, say a 2-6-6, or a 10-8, at the rate of 400 to 600 pounds per acre, than by the use of any but the very best quality of rotted manure, and manure of this grade is seldom at hand at the season for sowing turnips.

The average farmer will not care to grow more than half an acre, and the cost of say 250 pounds of 2-6-6 is so small that it will be forgotten when a good big crop of turnips is harvested in October.

POTATO BEETLES.

The Colorado potato beetle does not always injure the crop in this State, particularly late potatoes, but sometimes after a late spring, the adult beetles invade the fields and irreparable injury is done almost before the farmer is aware of it.

The best spray apparatus is the tank with power attached, which will spray four or six rows at a time. A good barrel pump in a wagon will serve for small patches.

Paris green is the old reliable poison used by potato growers. It has some advantages, the chief of which is that it works quickly and the patch

can be rid of the insects in 48 hours. This is important if the insects are large enough to devour the vines rapidly. The chief objections to Paris green are that a shower will wash it from the vines, and it may burn if used stronger than one pound to fifty gallons of water.

Arsenate of lead is fast replacing Paris green. Arsenate of lead is a slow poison and should be applied as soon as the eggs of the insects begin to hatch and the young come to the tops of the vines.

Use from two to three pounds of the poison to a barrel of water. This insecticide will stick to the leaves through the storms and be effective for two or three weeks after the application is made.—S. Arthur Johnson, Colorado Agricultural College.

YIELDS OF INDIVIDUAL APPLE TREES.

It is a matter of common observation and experience that different trees of the same variety of apple may express marked variation in their productiveness year after year. Certain trees may be noted for their free and regular bearing habits, while others of the same variety become marked individuals because of spare bearing habits. The individuality of trees in reference to the quality of the fruit has also been noted, and is now the subject of considerable comment and discussion.

Although these general observations have been accepted for a good many years, it has been difficult to secure data to back them up unequivocally. The report of the Horticulturist of the Dominion Experimental Farm contains a considerable amount of conclusive evidence on this topic. Records of the yields of individual trees of thirty-six varieties of apples have been kept for over twenty years, or practically from the time the trees came into bearing. These records present some exceedingly interesting figures. In certain cases an individual has been persistently unproductive. In other cases another individual of the same variety has been consistently productive. For instance, in two trees of Yellow Transparent, the yield records of which cover twenty years, we find that in that period one produced 67 bushels of apples, while the other produced only 17. In three trees of Duchess, two produced practically 100 bushels each, while a third only produced 30 bushels in a period of twenty years. With Wealthy, one tree produced about 75 bushels, while another produced just about half that quantity. With McIntosh there is even greater variation. One tree produced 95 bushels, while a second produced only 20 bushels during the twenty year period of observation. And so it goes with the remainder of the trees which were recorded during the period.

There seems to be no question as to the variability of individuals in reference to quantity and quality of product. The more important point is whether the distinctive characters and habits of the individuals will be transmitted when propagated by budding or grafting. There does not seem to be either unanimity of opinion on this subject, or satisfactory data to support statements one way or the other. At a recent meeting of the New York State Fruit Growers' Association, the Horticulturist of the Geneva Experiment Station was inclined to a negative view, and stated that the burden of proof lay upon the advocates of the theory, and that as yet conclusive evidence was wanting that bearing characteristics, quality characteristics, would be transmitted by a sexual reproduction. In the meantime, there is a large amount of interest in so called pedigree varieties. It is unquestionably a good line to follow.

SEEDS

Grain, Clover and Grass Seeds,
CHAS. E. PRUNTY,
7, 9 and 11 South Main St. SAINT LOUIS

Whether it will do all that its advocates claim seems to be an open question.—The National Nurseryman.

The Apiary

PROFIT IN KEEPING BEES.

If people knew what a great source of profit is found in the keeping of bees and how interesting the work, there wouldn't be an unused square foot of ground on any farm in the United States.

Bees are the only producers known to husbandry that yield a profit without cost of feed. They find their own pasture. They multiply so rapidly that they more than pay for the small initial expense of housing them, and the first cost of equipment is almost trifling.

Bee culture may be made profitable

CORN HARVESTER with blade attachment cuts and throws in piles on harvester or in winnow. Man and horse cut and shock equal with a corn binder. Sold in every state. Price only \$20.00 with fogger binder. J. D. Borne, Haswell, Colo., writes: "Your corn harvester is all you claim for it; cut, tied and shocked 65 acres milo, corn and corn last year." Testimonials and catalog free, showing pictures of harvester. Address PROCESS MFG. CO., Dept. 12, Salina, Kan.

by the children of the farm, or by the women members of the family. It may be carried on successfully in conjunction with the keeping of poultry or the growing of fruit. In the latter case, apiculture is found to be a great help toward more fruit and better fruit.

Bees are little trouble and require only occasional attention. They are easily handled and readily controlled. Best of all they give a real service in hard cash and that counts most on the farm.—Wesley Foster, State Bee Inspector.

PATTERNS FOR RURAL WORLD READERS.



9626. Lady's Dressing Sack.

Cut in 6 sizes: 32, 34, 36, 38, 40 and 42 inches bust measure. It requires 3 yards of 44-inch material for a 36-inch size.

9618. Lady's Waist.

Cut in 6 sizes: 32, 34, 36, 38, 40 and 42 inches bust measure. It requires 2 1/4 yards of 36-inch material for a 36-inch size.

9625. Lady's and Misses Balkan Dress.

Cut in 4 sizes for ladies: 36, 38, 40 and 42 inches bust measure, and in 3 sizes for Misses: 14, 16 and 18 years. It requires 6 1/4 yards of 36-inch material for a 36-inch size and 5 1/4 yards for a 16-year size.

9634-9607. Lady's Costume.

Waist 9634 cut in 6 sizes: 32, 34, 36, 38, 40 and 42 inches bust measure. Skirt 9607 cut in 5 sizes: 22, 24, 26, 28 and 30 inches waist measure. It requires 6 3/4 yards of 36-inch material for a 36-inch size. This calls for two separate patterns, 10c for each pattern.

9645. Girl's Dress.

Cut in 4 sizes: 8, 10, 12 and 14 years. It requires 4 1/4 yards of 36-inch material for a 10-year size.

9241. Girl's Dress.

Cut in four sizes: 6, 8, 10 and 12 years. It requires 2 1/4 yards of 36-inch material for the 8-year size.

9637. Lady's Princess Slip.

Cut in five sizes: 34, 36, 38, 40 and 42 inches bust measure. It requires 6 3/4 yards of 36-inch material for a 36-inch size.

9217. Lady's Dress.

Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 5 3/4 yards of 40-inch material for the 36-inch size.

These patterns will be sent to RURAL WORLD subscribers for 10 cents each (silver or stamps).

If you want more than one pattern, send 10 cents for each additional pattern desired.

Fill out this coupon and send to COLMAN'S RURAL WORLD, 821 Holland Building, St. Louis, Mo.:

Pattern No. Size. Years.

Bust. in. Waist. in.

Name.

Address.

In ordering patterns for Waists, give bust measure only; for Skirts, give waist measure only; for children give age only; while for patterns for Aprons, say large, small, or medium.

The Poultry Yard

DEPARTMENT OF AGRICULTURE
SENDS EGG AND POULTRY DEMONSTRATION CAR TO MISSOURI.

To aid the poultry and egg producers and shippers of Missouri to get their products to the distant Eastern markets in perfect condition, the Department of Agriculture is sending its Poultry and Egg Refrigeration Car on a demonstration trip to all poultry shipping towns in the state. The car started a tour beginning at Hannibal, Mo., June 27th, and expects to visit every railroad egg center of importance.

The car which is in charge of two government specialists in handling poultry and eggs, is a complete refrigerating laboratory on wheels. It contains two chilling rooms—one for preliminary chilling of warm eggs or poultry and a second room in which to hold the chilled stock. The reason for the two rooms is that if warm poultry is introduced into the refrigerating room it will cause the poultry already chilled to sweat. The car has its own gasoline engine for running the refrigerating blowers and for generating the electric lights used in the cold rooms. The engine drives a fan, the shaft of which pulls air through the false walls and dampers of the car and forces this fresh air through a large bunker of ice and salt. In thirty minutes the blower will reduce the temperature of the cold room to 32 degrees. It will chill eggs to 40 degrees inside of 24 hours.

The first step in the demonstration will be the scientific candling of the eggs to determine their freshness. Those interested will see exactly how the specialists candle eggs and grade them as "fresh," "light-floaters," which are eggs that have been kept too warm with the result that the yolk is toward the top and shifts easily; "bloodring" in which incubation is far enough advanced to show a system of blood vessels about the embryo chick; "white rots," where the yolk is mixed with the white, and "black rots" where no light can be seen.

EGGS FOR HATCHING—15 for \$1.50, 10 for \$2.75, 100 for \$6.00. From Exhibition Barred Plymouth Rock and Single Comb Brown Leghorns, at Glen Raven Poultry Farm. Circular free. Address E. W. GEER, Lock Box 104, Farmington, Mo.

REDUCED PRICES OF EGGS. For the months of June, July and August we will sell White Wyandotte, Columbian Wyandotte and S. C. White Leghorn Eggs at \$1.25 per 15; \$3 for 50; \$6 for 100. For Light Brahma Eggs, \$2 for 15; \$3 for 30. Address Michael K. Boyer, Box Z, Hammonton, Atlantic Co., New Jersey.

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through the egg. The demonstration in "white rots" is regarded as especially important for the reason that many expert candler cannot tell "white rots" from "fresh" as the candle gives a somewhat similar appearance to both. After the tests for freshness are completed, the demonstrators will grade the eggs by size, cleanliness of shell and soundness of shell in accordance with the standard gradings used by the egg commission men in the great centers of egg consumption. The eggs after they have been tested and graded and all below shipping grade have been eliminated, will be removed to the inner cold room and brought down to a temperature of 40 degrees and at that temperature will be packed in cases ready for shipment. Especial emphasis will be laid by the government demonstrators on the necessity of pre-cooling the eggs before they are shipped in an ordinary refrigerating car. Eggs can be cooled at 40 degrees Fahrenheit in 24 hours in such a refrigerating plant as that on board the car. This checks deterioration. If they are loaded warm in a refrigerating car, it takes them five or six days to get down to a temperature at which they do not spoil and during this time they are deteriorating rapidly.

Then will come a practical demonstration in skilled packing of eggs for long shipment. The most effective use of fillers (the paper partitions) flats (layers between the partitions) and buffers (the springy excelsior or cork used at the top and bottom of the cases to prevent the eggs from being broken by jarring, will be shown. The demonstrators will then discuss the best kind of wood and nails for cases and the number and placing of nails needed for each case. At the conclusion of the tests the local owners of the eggs will be free to ship them to their customers. This demonstration in packing eggs is regarded as very important for the reason that 9 per cent or over 11 million dozen eggs shipped to New York arrive there broken and unfit for food. The fault lay partly with the packing. The losses are so great that the price of eggs is abnormally high and railroads are complaining that egg shipping is not a profitable business.

To Demonstrate How to Ship Dressed Turkeys and Chickens.

While the main object of the summer trip of Uncle Sam's car is to deal with the egg situation, the demonstrators also will show those who wish such information, the most approved method of dressing, grading, pre-cooling and packing of poultry for the distant Eastern markets. Where poultry is properly refrigerated and chilled before being placed in a refrigerator car, the government specialists assert it not only does not lose its flavor but also keeps the weight and food value which runs off in water in the case of ice packed shipments. Poultry shipped under these methods therefore commands a higher price per pound and does not lose a heavy percentage of food material on its way to market.

The car spent last season in Kentucky. Here it was able to show Kentucky shippers how to ship carloads of turkeys to the New York Christmas market in such a way that they arrived in prime condition in spite of the abnormally warm weather just before the holidays.

Poultry commission merchants say that one reason why a great many shippers are disappointed in the prices they receive on good poultry is that they persist in shipping stock of sizes which are not in demand.

Some poultrymen do not believe in cutting a fowl's wings by clipping off the quills, as it makes them look unsightly. Instead they spread out the

Wheat or Straw?

On some of the best wheat land the crop runs to straw. This is because there are not enough available mineral foods to balance the manure or clover.

A field test on such land showed that Potash increased the grain from 20 bushels on unfertilized soil to 31 bushels where

POTASH

was used, and to 37 bushels where Potash and phosphate were used. Both were profitable. Supplement the humus of such land with 200 lbs. acid phosphate and 30 lbs. Muricate of Potash or 125 lbs. Kainit per acre. **Potash Pays.**

If your dealer does not sell Potash, write us for prices stating quantities required and ask for our free book on "Fall Fertilizers." Study of the fertilizer question means saving and profit to you.

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wing, and cut the feather portion from the quill. This leaves bare quills, and when the wing is closed it rarely shows that the wing has been tampered with. Only the one wing is thus cut.

An old-time theory said that hens without the attention of a male would lay as well, but not be so apt to become broody as those mated. Our records show they will lay as well, but unmated flocks are not broody-proof by any means. The past season our unmated birds, with a few exceptions, became broody first, while two-year-old hens were the last to show any signs.

There is a prejudice in market regarding the color of the egg shell. It is a prejudice of long standing, and will, without doubt, remain with the buying public. The average American market prefers a brown color, while New York City is ready to pay a premium for white-shelled eggs. The

brown egg buyers in particular claim that the eggs are of a richer flavor. All this is imaginary, when we come to understand that it is food and not color of shell that flavors the egg. Is it reasonable to suppose the brown egg of the Brahma fed on onions could be as sweet as the white egg of the Leghorn fed on clover?

It is not profitable to treat fowls suffering from a contagious disease. It is a better move to at once destroy all such cases; there may be an epidemic. The lighter ailments, such as colds, for instance, should be promptly treated, and we know of nothing better than a quinine pill (one grain) each night for about a week; four drops of tincture of aconite in a half pint of drinking water is a good remedy for a cold that shows itself by sneezing. When a fowl is droopy, loss of appetite, and the comb and wattles do not have that bright look they have in health, very often a family liver pill will work wonders.

COLMAN'S RURAL WORLD

Founded by Norman J. Colman.

Published by

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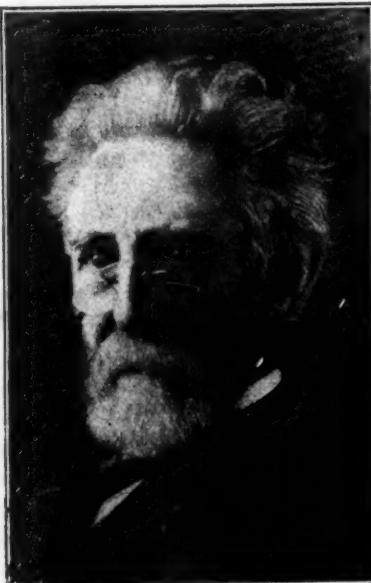
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The RURAL WORLD is published on the cash in advance system and the paper is stopped when the time paid for has expired. If subscribers receive a copy with this notice marked, it is to notify them their time has expired and that we would be very glad to have prompt renewal. While our terms are One Dollar per annum—a low price considering the high quality of paper we use—yet so anxious are we to extend the benefits that we believe the RURAL WORLD confers on all its readers that we will for a limited time take subscriptions, both new and renewals, for 50 CENTS A YEAR. "Once a subscriber to the RURAL WORLD, always a subscriber." Farmer's can't get along without it. Please remit P. O. money orders, or checks on St. Louis banks, as our banks all charge five cents for cashing local bank checks, however small. We appreciate the kind efforts of our patrons in all parts of the Union in speaking good words in behalf of the RURAL WORLD, and it is to these efforts we attribute our constantly increasing circulation.

The co-operation of reputable and responsible concerns, through our advertising columns—firms whose products and methods are creditable, and upon whose representations our readers may rely—is respectfully solicited, that our advertising pages may be really representative of American Manufacturers and their goods.

Contributed articles, communications, etc., on pertinent subjects, are invited. The Editor assumes no responsibility therefor, however, and their publication in nowise implies editorial endorsement, beyond the Editor's belief that frank and courteous discussion of all questions within the province of this journal is to the best interests of our readers.

Entered in the post office at St. Louis, Mo., as second-class matter.

Take your family for an outing once in a while and thus change the daily grind. Everyone will feel better and do more efficient work afterward.

Do your own thinking. Originality means much. It is too late for you to copy the methods of someone who has reaped the profit. This is an ever-changing world, and the acts of last year, while successful, may be the very things you should avoid. If you

do as others do you cannot expect to outstrip anybody.

The time has come when the farmer, who produces the nation's food and makes possible a balance of trade favorable to this nation, is being appreciated.

Good roads have a moral, civic, and educational value which cannot be measured in dollars. Good schools cannot be reached except we have good roads.

Everyone can tell us something they know from experience and we will be glad to give it to our readers. We like short, concise letters so we may have space for a larger number.

Don't fail to show your copy of the RURAL WORLD to your neighbor. In this way you will help him and he will soon become a constant reader. Our aim is to make this paper invaluable to the farmer and his family.

Notwithstanding the many reforms under discussion at Washington, including currency reforms, tariff reductions, lobby investigations, the country has big crops in sight, which is the biggest factor in controlling business activity.

The mob that destroyed property in Seattle must not hope for anything but the condemnation of all law-abiding citizens. Mob spirit is founded on ignorance, and in this case they were uniformed sailors whose duty it is to preserve order.

The hen—investment and labor considered—is the most profitable of all farm animals. Every year the value of American poultry products exceeds the combined value of gold and silver mined in America. Missouri is the queen of poultry states.

There is a great similarity between the dairy cow and the banking business. Both draw interest nights and Sundays. What is needed is intelligence to raise the standard of your money-maker by thoroughly understanding breeding and feeding.

Don't fail to pass your copy of the RURAL WORLD to a neighbor. It will help him as it helps you. Try and get him to take it. It is by far the best investment he can make, as the information he gets weekly is indispensable to good and profitable farming.

Diseases have a way of working their own cure. Is there hope that this will prove the case with the present much-discussed dances? The desire to be "different" is apt to assert itself in time. A leader in the "exclusive" social set at Newport is described as having engaged an instructor and made plans for dancing this summer at her entertainments which shall be quite dissimilar to the popular (that is, "common")—tango and turkey trot. We may be allowed to wish power to her elbow—it would be indiscreet to say to her heels.

One reason why Japan strongly desires a long peace is the great expenditure immediately required for internal improvements of all sorts. For example, Tokio proposes to spend 10,000,000 for harbor improvements which will take at least 10 years. The plan adopted involves the reclamation of 1191 acres of water front to be filled in with earth taken from the bottom of the harbor. A canal will be built six miles long and 270 feet wide with a depth of from 25 to 40 feet. The total excavation area will be over 1000 acres. As a result of these improvements a material reduction in freight charges is looked for.

READING, THINKING FARMERS.

Farmers and others who think are all readers, and the reading farmer has ceased to be ridiculed. Farming must be done by farmers, and they have a literature of their own. The hidden truths about the earth must be made known and understood before any great achievement in farming can be accomplished, and to really know and understand these underlying principles men must read and study the articles specially prepared on these subjects. The farmer who does not read and study, farms like the multitude, and must be satisfied with unsatisfactory results. We try hard to give the farmer the help he needs in this paper and would be glad to hear from our readers as to the measure of our success.

FARMERS' CO-OPERATIVE ELEVATORS.

Co-operation is the key that will unlock the door of prosperity to the farmer. This is becoming more firmly established in the hearts and minds of the struggling farmer everywhere. In this connection we quote an excerpt from the Co-Operative Manager and Farmer, which very completely covers the situation.

"If my livelihood, and that of my family, were dependent upon a farm, I would feel that my position and their positions were much more secure for all time to come if the property lay within the shadow of a farmers' elevator."

"If I were to own town property in any town in the state of Michigan, or any portion of the grain growing area of the United States, I would feel that my investment was more secure if such property was within a few miles of a farmers' elevator."

"If I were to conduct a local bank and be dependent upon the thrif of the merchants of the community, and the thrif of the farmers of the surrounding territory, I would consider my business on a better basis if there was a farmers' elevator at my location."

"If I were to consider the purchase of a farm in Michigan or any other part of the grain growing area of the United States I would feel my investment was more secure if the property lay within hauling distance of a well-organized and well-managed farmers' elevator. I would then feel my investment was secured by virtue of the best devised plan ever known for the marketing of my products, insuring the highest possible price for them at the home market. I would feel that the farmers' elevator constantly stands between my investment and the possible greed of individuals."

WHAT IT COST MISSOURI FARMERS TO LIVE ON BAD ROADS.

How states and counties are putting money in the pockets of the farmers by investing in the improvement of public roads is shown by a statement just issued by the Office of Public Roads of the Department of Agriculture. Definite cases are cited in support of the argument that where bad roads prevail farmers are forced to move their crops not when the market price is favorable, but when the roads are favorable.

Two farmers living in separate counties but at an equal distance from the cotton market, learned by telephone that cotton had advanced in price 1.00 per bale. The farmer living on a bad road responded by hauling one bale of cotton, which was all he could get over the unimproved road, while the other farmer was able to haul four bales, owing to favorable road conditions. The rise in price gained a prof-

it of \$4.00 to one man, and \$1.00 to his neighbor.

It is shown in the statement that it is common for the farmer to find that he can not haul his produce to market when prices are highest, because the roads are impassable. When the roads become passable, the time for market has largely passed and produce is compelled to move in masses, which frequently glutts the market and breaks the prices.

Excessive fluctuations in market prices are seldom due to over-production. They frequently take place in regions where the local production does not equal the annual consumption. There are counties rich in agricultural possibilities, burdened with bad roads, where the annual income shipments of food-stuffs exceed the outgoing shipments in the ratio of four to one. Many such counties with improved roads could not only become self-supporting, but could ship products to other markets.

A farmer in Sullivan County, Tenn., a few miles distant from Bristol, had 100 bushels of Irish potatoes which he intended to market during the winter of 1907-1908. Owing to bad roads, he was unable to haul the potatoes at all, and they rotted in the cellar. Nevertheless, the price of potatoes at Bristol went as high as \$1.40 per bushel in the meantime. A Bristol merchant stated that during the winter as many as 10 carloads of farm produce, including wheat, potatoes, and other supplies, were daily shipped in to feed not only Bristol, but the adjacent territory.

A cablegram dated July 23, 1913, from the International Institute of Agriculture, Rome, Italy, which has been received by the United States Department of Agriculture, gives the following estimates for European Russia: Production of spring wheat, 511,101,000 bushels; all barley, 530,297,000 bu.; all oats, 1,029,623,000 bu.

Surely no one will envy the Wilson administration with the number of pressing problems now confronting it. There is the ever-present Mexico situation, the Japanese treaty question, and the advisability of placing a protectorate over Nicaragua, any one of which would be sufficiently important to tax the diplomatic resources of any government.

Travelers in Canada have long had cause to admire and envy the system established by Clifton Sifton while minister of the interior in the Laurier government for the care and distribution of immigrants to the Canadian Northwest. The first, and greatly belated, inland immigrant station in the United States is now about to be established at Chicago on an appropriation of \$100,000 made by the recent Congress and will serve as a relay point in forwarding immigrants to their destinations. The object is to protect them from being imposed upon—particularly those who cannot speak English; the men from being "shanghaied" by employment agencies, the women from being led into the white slave traffic.

For barbarous prison conditions in America, it is now necessary for visiting European phrenologists to see New York State. Sing Sing prison is described by nearly every one, from the warden to the grand jury, as a reproach to civilization. Prison reformers have condemned it for years. Recently there have been numerous administrative scandals in connection with the institution. Finally a neighboring grand jury walks in, looks around and reports that things are too vile for belief. But newspaper comments are that there's nothing new can be said against Sing Sing and unless something is done toward providing a new prison, the outside world may be forced to think that New York enjoys its distinction.

ODD ITEMS, SHORT AND LONG.

By C. D. Lyon.

Did you ever know a man who prided himself on his fine stock and good farm equipment, and who planted scrub seed and neglected to haul out the manure? I have.

Do you know that it will not be long until that man will find his lands yielding unprofitable crops and become worn out? I do.

Did you ever see the man who had no time to attend the meetings of a farmers' club at a baseball game? I did not, for I do not go to baseball games, but that man always does.

Have the canning factory or creamy promoters "peeled" any of you lately? The last named sharks got in the people of an adjoining county for \$6,200 last month.

Has anybody been trying to sell you harvesting machine company 7 per cent stock? Those fellows sold \$125,000 worth in this "neck of the woods" five years ago, and it is not worth 7 cents on \$700, and never was.

Do you know the man who "cannot afford" to spend 50 cents a year for a farm paper? I have met him and I heard that last week he got a "shipment." This shipment consisted of a two-gallon jug of mail order whiskey, made of alcohol, cayenne pepper and cheap tobacco extract.

CURRENCY LEGISLATION.

Editor RURAL WORLD: Now that we are to have some currency legislation it is a good time to think over the basis of our whole monetary system. We have a stable measure of time. The time necessary for one revolution of the earth on its axis is divided into 24 equal parts called hours; the hour is divided into 60 equal parts called minutes, and the minute is divided into 60 equal parts called seconds. The measure of length is based on the measure of time. The length of a pendulum beating seconds in a vacuum at sea level was divided into nearly 4 equal parts and six hundred thousand of these make an inch, the unit of length. The measures of capacity and weight are determined from the measure of length; 277 $\frac{1}{4}$ cubic inches of distilled water at 62 degrees Fahrenheit make a standard gallon, and 27 $\frac{1}{4}$ cubic inches of the distilled water weighed at sea level is one pound. These measures are all stable and remain the same.

But how is it with our measure of values? Our dollar, the unit of this measure, is based on a single commodity (gold), which, like all other commodities, must, in the very nature of things, be affected by the law of supply and demand. It is claimed that the value of gold, as of every other commodity, rests ultimately on the amount of labor necessary to produce it. New and richer mines, together with new and better methods of mining, has increased the annual supply of gold from about \$100,000,000 in 1896 to no less than \$600,000,000 now. Everybody knows that if the production of wheat was increasing at such rate, the price would go down. So of corn, oats, coal or any other commodity. Then why should not the value of gold depreciate under present conditions? This depreciation is not apparent to superficial minds simply for the fact that gold is measured by gold. But thoughtful minds can see that no decree of a human government can annul a law of nature, and the law of supply and demand is practically a law of nature. "The cost of living," of course, is determined by the purchasing power of the dollar; but have those commodities which constitute the "living" appreciated, or has the purchasing power of the dollar depreciated? The increase in production of the staple articles that make up

the living of our people has not more than kept pace with our increase in population, and ought to have a slight appreciation in value, but in all reason, we submit that, at least, sixty per cent of the seventy-five per cent of the increased cost of living is chargeable to a depreciated dollar. A much more stable dollar may be had by basing it on 50, or even a hundred commodities—such as wheat, corn, rye, oats, coal, iron, copper, zinc, etc. The idea that the circulating dollar must have in itself, intrinsic value is, and always has been, a misleading idea. The function of money is to facilitate the exchange of commodities. It ought to have no other function, but the gold dollar, carrying as it does, its intrinsic value into circulation, is hoarded by thousands. In a later communication I may illustrate how the value of the dollar based on 50 commodities may be obtained.

S. S. HARDIN.

THE POWER OF LOCATION.

Editor RURAL WORLD: Any chance for any steady job, however small, at small wages in any city, will bring crowds of men on the stampede for it; and yet every year Western farmers offer two and three dollars per day, and board—and board, mind you—for harvest hands. They seem to hold to the maxim, "Better starve in the city, than get fat in the country." It is better to travel to the section that demands laborers and work honestly, sending the money home to the family, or investing the wages in a home. Go where labor waits thee, get to be a tenant farmer, and then send for the family.

One paper advises, "Go east for abandoned farms and a chance," and another says, "Go west." I say, go where you can find more work, be it far west or east, but be sure to put full name and address on or in clothes, avoid all tramps and rough company, and avoid risky travel, lest accident deprive the family of its chief support. Even if you never saw a grain field or a shovel, if you are willing to work all you are able, there is a paying job somewhere, and the task is to assemble the two. Even where you are there is work for the willing. The trouble is there are so many thousands of men too lazy to work for even "two dollars and," yet they must be fed!

CLIFFORD E. DAVIS.

POCAHONTAS, ARK., NOTES.

W. T. Bispan, Pocahontas, Ark., sent in a subscription and writes as follows: "I have a fine crop of Elberta peaches, but they will not be as large as they were year before last on account of the hot, dry weather we are having, but they will be nice and clean and well colored. All crops, truck, fruits and vegetables in this section are suffering damages for want of moisture."

We would be pleased to hear from Mr. Bispan again, and no doubt his neighbors will also be interested.

In Honan, where the drought prevented the planting of crops and the famine is serious, the Chinese have taken their gods out of their temples and set them in the sun to bake till they appreciate the need of rain. During a recent typhoon Chinese sailors set off firecrackers to propitiate the offended deities. It seems very strange to us, yet it is not so long ago that gas balloons were being exploded in Texas to make rain, and during the last eruption of Aetna were not images of saints carried to check the lava flow? In the nineteenth century the president of a Western college prayed for rain and his congregation took their umbrellas to church. The Chinese may be heathen, but their instinct in time of trouble is much like that of other people.

ITEMS OF INTEREST.

Lige Guillion, near Benbow, threshed 1500 bushels of wheat from 60 acres, a yield of 25 bushels and every grain a prize winner.—Ewing News.

Clarence Berry, out toward Hollensville, this county, has a 200-acre field of corn, and he says the prospect for a fine yield is the best he has had in 30 years—drouth or no drouth.—Mexico Message.

Wm. Clevenger brought the News a very peculiar ear of green corn a few days ago. While it grew on a regular shoot from the ear, and was covered with the usual husk, yet it is eight complete ears all branched from the same base.—Coffey News.

When it rains, if it ever does again, several farmers with whom we conversed, stated that they would plow their corn fields and sow either cow peas or soy beans. They anticipate that these will give them plenty of winter fodder.—St. Clair County Democrat.

Just to show how Mansfield is attracting attention, not only in America but in Europe as well, Dr. F. H. Riley showed us a letter the other day from London, England, from a company desiring to appear at Mansfield's second annual agricultural and stock show. Advertising pays.—Mansfield Mirror.

The farmers have for 10 or 12 years banded together to buy Percheron and coach horses. Why should they not now band together in stock companies and buy pure bred sires for their dairy herds? Polk county is primarily a dairy country and the stock can be most easily built up by buying the pure bred sire.—Bolivar Herald.

Now is the time to get ready for the fair. Every farm should show what it can produce. The County Fair offers one of the best and cheapest means we have for advertising our farms. In addition to the direct personal benefit it is the duty of every citizen to help show other parts of the county what his part of the county can do.—Palmyra Spectator.

Mr. J. Frank Brown of southwest of town has made an oats record. He tells the Missourian that on eight acres he threshed an average of 55 bushels per acre. The land was fall breaking and properly prepared this spring. Frank bought the seed of Mr. Jno. F. Brown, Jr. He says that the work done in carefully preparing the soil helped to do the business.—Richmond Missourian.

Silas Drake wishes to inform his many friends that he has just completed a 60-foot well with 19 feet of water just across the road south of his residence. The well is fully equipped with pump and trough and he says everybody is perfectly welcome to water their horses, automobiles, and to take a drink themselves. The well is located by the roadside and will be greatly appreciated by the public.—Altamont Times.

Geo. Grant brought into this office a sample bundle of oats from his Hunnewell farm that was over three feet tall on the average. He estimates they will make thirty bushels to the acre easily. In fact, a neighbor offered to wager that they would average 30 bushels to the acre. Mr. Grant finished cutting 40 acres of these oats last week. A month ago he says they looked very sorry indeed. This shows the wonderful recuperative power of Missouri soil.—Shelbina Democrat.

Travelers who passed the farm of Gov. McCreary in Sampsel township Wednesday were surprised to see a force of men shucking corn in a field where the wheat had been cut and shocked. Mr. McCreary had a large acreage of corn last year and was unable to get the corn out of the field before the wheat had gained such

growth that it was impossible to get a wagon in the field. This is an unusual incident in Livingston county and caused much comment.—Chillicothe Constitution.

Wm. Deering received a letter from W. A. Rinehart, who is in Marion county attending to the threshing of his big wheat crop, in which he says, among other things, that from 70 acres they had threshed 2318 bushels for wheat, making a little more than 40 bushels per acre. He says that in all they have threshed something like 12,000 bushels and that he thinks the entire crop will amount to about 33,000 bushels. Probably this is as large a crop of wheat as was ever raised in northeast Missouri.—Green City Leader.

E. C. Jarman of Jackson Township, who was the first west-end farmer to call on County Man Long for an expert from Columbia to vaccinate his hogs against hog cholera, is an enthusiastic advocate of the serum treatment. He had 200 porkers in the bunch vaccinated. Notwithstanding a number of hogs died on the farms adjoining his, he lost but one, and that one was sick before vaccination. A few days ago he sold 69 hogs, averaging 218 $\frac{1}{2}$, for \$8.40. He has the balance left on the farm, all healthy and sound.—Holden Progress.

H. C. Gamm of near Maywood was in town the other day and told us of the result of an experiment he had tried when sowing wheat last fall. In preparing his seed bed he harrowed over one piece of corn ground, consisting of about twelve acres, three or four times extra. Last week he threshed out the yield and found returns of some twenty-seven bushels to the acre, a large yield on corn ground. Mr. Gamm reported his corn to be in good shape still as the result of cultivation both ways on the field immediately after the last rain fell.—La Grange Indicator.

Ike Smith raises ducklings and is a utilitarian of note also. Gray hairs have come with advancing age and a bald spot has appeared on his poll where the festive fly is wont to feed when Ike takes his Sunday after-dinner siesta. But he has made fly traps out of his fluffy young ducklings. They gather in squadrons round his head when he lies down to snooze and the patter of the little red bills as they pick the flies off his bald pate soothes him into pleasant dreams and makes a better show for the family audience than can be found in any moving picture.—Belton Herald.

John Lents has the best oats that has been threshed in this part of the county up to date. Mr. Lent's oats made 74 bushels per acre. This is the best yield for many years in this part of the county. These oats were sown before the rains of early spring set in, and part of the field was sown down in the corn stalks, and were not even covered, as it began raining and continued so until the oats were up too far advanced by the time the soil dried, and so Mr. Lents just chanced his luck on the oats making a crop. By so doing the results proved very satisfactory.—Gallatin North Missourian.

The Macon Creamery Company had the largest day's business Saturday they have ever had in any one day since they started in business. They are now receiving the cream at the new building on Vine street and the farmers seem to greatly appreciate the facilities they have for handling their products. The ice plant is running full time and car-loads are leaving the factory as fast as the orders can be filled. Large quantities are also delivered each day at the plant. This is one enterprise that has come to stay, and fills a long felt want of Macon and surrounding country.—Macon Times-Democrat.

Home Circle

THE SHEPHERD'S PASSING DREAM

We're traveling through the rue, my Jean,

We're traveling through the rue;
The night is cold, the wind is keen,
Your plaid is wet with dew.

The time is long, my bonnie love,
Since thou and I wert young;
And far away the cushat dove,
Which then so sweetly sung.

We've traveled down the hill of life,
And left the bonnie view
Which cheered us on its top, sweet wife,

When all the world was new.

Still, while I hold thy trembling hand,
And stroke thy faded hair,
The time and grief that love hath spann'd

Seem shorter and less sair.

I'm dreaming still, my bonnie Jean,
Of life and love with you . . .
The rosemary is wet with rain,
Our path runs through the rue.

The sheep once folded in the pen
Have wandered far and wide,
And, seeking shelter in the glen,
Bleat on the mountain side.

The lights are burning low, my love,
My brow is wet with dew;
I hear again the cushat dove
Sing, bonnie Jean, with you.

* * * *

Sing soft and low, my bonnie Jean,
In tones so fond and true;
This is the last, last time, I wean,
We'll travel through the rue.

—Joyce Jocelyn in Otago Witness.

Written for the RURAL WORLD.
A FEW THOUGHTS.

By Aunt Samantha.

Dear Home Circle Friends: Perhaps the most of you have forgotten me, but I assure you I am not forgetting the writers to our good old RURAL WORLD, but read with interest unflagging all they have to say from week to week, and want to say to "Goose Quill" I heartily endorse his speech from start to finish in the RURAL WORLD, July 17th. Am glad to know that he, as well as a few more wise men, is willing to accord women the privilege of voting—the "right" that has always been hers, though she has been deprived of the privilege of exercising it. She is now coming into her own, and I am glad of it, and I sincerely believe that she will use the ballot as wisely and well—perhaps better—than her sturdy brothers have done. I can not see why she should become any the less womanly or lady-like in her manner or conversation simply because she steps up and casts a ballot into the ballot box. I believe that one thing is certain, however. She will not knowingly and willingly cast a ballot to help elect a dishonest man (or woman either) to an office, but will strain all her God-given powers to do the right in this matter as God gives her the power to see the right. It seems to me anyone who believes in civic righteousness would believe in women voting if they want to. But I do not believe in the way some of the women are acting over in England. It is not right to commit a wrong that good may come of it, and I can not see how anyone can expect to bring about any good thing by tearing down and destroying property as the suffragettes are doing over there, and when they put them in jail for their wicked deeds and they foolishly go on a "hunger strike" as they call it, I do not believe they should release them.

BEAUTY

BEAUTIOLA makes Beauty in one week. Price, 50c. Agents wanted. Big seller and profits. THE BEAUTIOLA CO., Beaufield Bldg., 2928 Olive St., St. Louis, Mo.

Just let them alone, and if they have no more sense than to starve with plenty placed before them to eat, then let them starve. They do not deserve any better fate.

The ladies of our church are making preparations for entertaining a number of visitors during the Chautauqua that will be held in La Belle from the 17th to the 23rd of August, inclusive. We are to provide sandwiches, ice cream, cake and lots of other good things to be handed out to the hungry ones from our church lawn; also we have a nice rest room in the church parlors where the weary can rest and be refreshed with good cool water, and other drinks, such as lemonade, etc., will be sold from our lawn to the thirsty ones.

La Belle and vicinity is suffering from a drought at present; we are hoping it will rain soon. The corn and crops of all kinds are needing rain badly. Most of the hay harvest is done around here, some are putting up oats, and every one is busy either for himself or helping his neighbor.

Well, as I have reached the end of my page and also the patience of the editor, will close with best wishes for all.

Written for the RURAL WORLD.
POSSIBILITIES OF THE VOTE.

By "Harriet Marshall."

During the past month the Governor of Illinois signed the suffrage measure, letting down the bars, and thereby permitting the women to enter the political ring.

Let us hope that the other states will eventually see the advisability of this move, and in the near future follow this precedent.

Now that the vote is literally within the grasp of the women, it would be an excellent plan for those belonging to clubs to employ part of the time discussing civil law, occasionally engaging the services of some able lawyer to explain the different questions. This would serve much better than listening to tiresome papers on subjects, such as the unearthing of another Cheops, or some other antediluvian. Those are all right to read about, but they do not render any assistance on present-day questions.

Women can bring influence to bear on laws having to deal directly with the home, for that is their own especial domain. The husband and father is the breadwinner, but the wife and mother is the power that rules the stronghold of the home.

The father very rarely settles disputes among the children, invariably referring them to the mother. The children, themselves, in their quarrels and differences, exclaim, "I'll tell mamma on you!" and to mamma they go, knowing that she will mete out justice, and punish the offender.

They are undeniably better able to cope with matters pertaining to the home and school, from the simple fact that they are in constant touch with them, while on the other hand, men are better judges concerning laws regulating buildings, streets, highways and the public safety in general.

A most commendable use to which women can put the vote is to combat the drink evil. Having suffered and endured so much from this, they might see their way clear to lessen its increasing influence.

Although always living in a select portion of the city, I can remember from my earliest childhood seeing tin cans and pitchers, from other localities, passing not once but many times a day, often carried by little children. Sundays, the vessel was disguised by a newspaper or else deposited in a bag or basket. On one occasion, the carrier hurrying along on a hot summer's day, seemed greatly nonplussed at beholding the foam issuing forth and dripping onto the street from an innocent looking yellow paper sack.

All other respectable places of busi-

ness close on the Sabbath. Why does the saloon ply its trade on that day? Butcher shops and groceries are compelled to close, but with regard to the saloon there is always a crack large enough to permit the entrance of a tin can.

Another act of charity on the part of the saloonkeeper is selling liquor to men who are already pretty well over-balanced. When the poor wretch is completely under its influence, he either rolls out or is kicked out into the gutter, there to sleep off his intoxication. If he can pick himself up he staggers and reels along the street in imminent danger of being run down by automobiles, motorcycles or street cars. The man who dispenses liquor in such a case is committing a most grievous injury toward the imbiber, and is guilty of even greater injustice to his family.

A man always falls back on the flimsy excuse of drowning his troubles in the whiskey glass, while his wife drowns hers in the steaming wash tub. In accordance with the laws of proportion, the greater the trouble the larger the vessel it takes to drown it in. To say the least, it is a bad plan to drown one's self along with a week's wages on Saturday night or Sunday.

The women now in the beginning of their newly acquired right, resemble the acorn, apparently insignificant and unimportant. But as the unpretentious acorn gradually assumes the elegant proportions of the oak tree, throwing forth its protecting shade and shelter for weary mortals, so may the women, fostering and nourishing this power by serious thought and study, at length use it as a means whereby to cast an impregnable barrier about their home and fireside, warding off and defeating the enemies that seek to destroy this most sacred spot on earth.

Written for the RURAL WORLD.
MORE DOTS FROM DYPE.

By Will H. Freeman.

Several of the old writers have appeared since our last contribution, and as one has expressed it, "makes the page look 'old-timely'." We are glad to see them coming back. It gives renewed inspiration to keep the page up to the standard of perfection it has always maintained. What with the old and the new it cannot be excelled in classic literature.

The poem by Adela Stevens Cody is a gem in poetical lore; a meritorious tribute to one whose life has been a benediction to all who have come within its influence. Rosedale Farm, the home of Ross Autumn, is only a few miles distant, near Vandalia, the old State Capital. It is one of the most beautiful places in all this region. She is passing the evening of life surrounded by loving friends, and her venerable husband, peacefully awaiting the summons to "come up higher" and enter her reward for a life work well done.

We heartily endorse the sentiments expressed by Goose Quill—"Let the women vote." When we lived in Kansas years ago, the women had the privilege of suffrage up to and including in municipal elections. They came to the polls, voted and returned to their homes. All was quiet and orderly, in vivid contrast to election days we have witnessed in other states. While we were previously on the negative side, have since been favorable. The recent Legislature has given the women the right to suffrage in this state, except for statutory questions and on all questions submitted to the people. We predict that the saloons will go. Every saloon interest in the state opposed it, because they knew that the ballot in the hands of the women sealed their doom.

You can "ring up" thousands of families by inserting a small ad in our want columns at one cent a word.

Written for the RURAL WORLD.
COUNTRY LIFE FOR CHILDREN.

If Luther Burbank put into operation his idea for rearing and improving children, I wonder whether he would choose for his location the country or city; and I wonder whether he would choose for material country or city-born children. But, on analysis, I know that his material would be from the city for he would have no choice. It would be orphans and waifs from the big city institutions or strays off the streets. In the country there seem to be no such and the orphans all live with their relatives, "Aunt Mary or Uncle John."

Given then the city-born children, what next? Build big brick buildings with courts for play grounds and to have more air. Down in the basement put a gymnasium equipped with ladders, dumb-bells, etc. Then let there be rooms in the big buildings where all sorts of manual training is taught—carpenter and other work, and so on. Have other rooms where the girls may learn cooking and sewing. I won't keep on we all know the twentieth century ideal institution.

But my question is, would Luther Burbank—upon whom the American people have conferred their highest title, "Wizard"—would Luther Burbank proceed in this manner? Like all up-to-date wizards, Mr. Burbank works his wonders by the aid of practical science, and his penetration and logic are faultless. I believe that he would hold as an error the city buildings with all their advantages which I have named. These would be instead long and low buildings, on country hillsides, and in them there would be no gymnasium for unproductive work or exercise, for the studies, with the garden and the tilling of the field and garden would give plenty of exercise. Carpenter and other work there would be plenty in abundance, but none would be useless. And the girls they would have their work, cooking, milk of their own milking, butter of their own churning, and buttermilk, chickens and eggs from their own poultry, home grown vegetables, and so on.

Would this life mould ideal citizens? You ask, would these farmers or country boys especially be able to cope with the sharp-witted city men? Though it is admitted that country-bred children are physically stronger than others, yet there has been much argument in favor of the superior mental ability that city life engenders. I believe that such argument is fast losing ground with the advent of the progressive farmer who studies intensive agriculture, who is taught and strives scientifically "to make two blades of grass grow where but one has grown before." To be a farmer no longer means to be heavy, stupid, content to plod along year in, year out, making nothing but a meager living; the farmer of today is a student and uses his brains. He no longer walks wearily along behind his plow, but sits on a high seat and drives his team or even runs a motor plow. His up-to-date works does his work far more quickly and far better than the former hand tools. He studies the chemistry of his soil and the diseases of his grain, fruits and vegetables. He is not content that his poultry have reached the 200-egg per annum standard. He keeps his books of account carefully. He reads the daily market quotations. In short, the successful farmer of today is mentally alert and much of a business man.

I took it for granted that the country-boy is physically stronger than the city boy. I trust I have shown that the modern farmer boy should be mentally fully as able as his city brother. Add to this fact the fact that the country boy is under no nervous tension, his work is done out of doors in the pure, fresh air; he does not

Horseman

George Sanford, Bethpage, Tenn., sold his splendid saddle stallion Star Light to a party in Texas for \$1,000.

Mrs. Herman Hegeler, Danville, Ill., bought from E. A. Spires, Holliday, Mo., the gelding, Japilack for \$600, and from W. C. McCann the filly, Virginia Rose for \$500.

Sarah Ann Patch 2:06½, will go to Philadelphia from Pittsburgh to fill a one-day engagement in the Quaker City, where she meets Directomer, 2:09¼, in a match race for \$1,000 a side.

The horses at the International 1:55 Horse Farm, M. S. Savage, proprietor, Savage, Minn., are taking their work in a most satisfactory manner. The pet of the farm, Dazzle Patch, is in splendid condition.

Ambernell 2:23, five-year-old pacing gelding in the racing stable of Al Russell, is the initial standard performer for R. Ambush 2:09¼, the handsome trotting stallion owned by Tangier & Brosius, Carthage, Mo.

Springfield, Mo., will hold its annual fair and race meeting Oct. 7-10, with entries closing Aug. 17 to a number of purses valued at \$500 each. In addition, several events for harness horses for purses of \$3000, close Sept. 15.

Secretary Elmer Iden at Smithville, Mo., advises that purses for the meeting Sept. 16-18 closed well. The total of entries is 162, with 31 for the 2:19 pace, 30 for the 2:25 trot, 26 for the 2:30 pace, 24 for the 2:14 pace, 22 for the 2:35 trot, 17 for the free-for-all pace, and 12 for the 2:17 trot.

Col. Paul Brown of St. Louis, made a flying visit over to Oakland, Ky., several days ago, where he has several mares that are being bred to My Own Kentucky. While here he purchased from S. J. Henderson, a very choice daughter of this noted sire at a fancy price. The mare is thought to be safe in foal to the service of W. R. Whitlow's young stallion, Artful Rose 4472.

Emerald Harrison 4297, at the head of Hillsdale Stock Farm, of which Oscar Edwards & Son, De Soto, Mo., are proprietors, is making quite a reputation as a sire and is going to be in somebody's way when the bell taps. This horse is a dark bay, four white feet and has the step of the Chiefs. Sired by the greatest of sires, Emerald Chief 2132 by Bourbon Chief 976; dam Lady Harrison 2807 (also dam of the sensational Miss Carrick); second dam by Green's Edwin Forest; third dam by American Eclipse; fourth dam by Cherokee.

A resolution recently adopted by the American Saddle Horse Breeders' Association condemning the activities of the federal government in the field of horse breeding reads as follows: "It is the sense of this meeting that the breeding of horses is not properly within the function of the government, and the undertaking on the part of the War Department and Department of Agriculture of the United States government to breed horses for cavalry service is an unwarranted and unjustifiable interference with private enterprises." There are many men in the breeding ranks who hold the same opinion and who assert that the government would be able to get all the horses needed for any purpose if it were willing to pay the farmers a price that would make their raising fairly profitable.—Horse World.

L. E. CLEMENT'S WEEKLY LETTER.

Editor RURAL WORLD: Lady Grattan has entered the 2:10 trotting list. She was sired by Joe Grattan, a son of Grattan out of the dam of Joe He 2:07¼. Her dam was one of the best thought of by the Parsons, Kans., people and was sired by the Missouri bred horse Hershon, brother to Nora Seely, the first Missouri bred horse to trot in 2:30 as a three-year-old. Joe Grattan was owned by Clem Ware at Jefferson City, Mo., and showed better than 2:10 in his first race. He was spoiled for racing while Ware had him in the East under the management of the party that drove the Sweet Springs, Mo., horse Dillon Boy in 2:09¼. They are giving the mare as bred in Texas. I think this is a mistake. She was probably bred in Kansas.

Early Reaper 2:09¾, so long owned in Jasper county, gets a new one in the list when Big Reaper trotted a winning heat at Brookfield, Mo., in 2:19¼. This makes the fourth trotter to the credit of Leonine, the other three being Big Timber 2:12¼, Little Timber 2:17¾, by Goodwood 4106, and King Ross 2:24¼, by Anteros, all bred by John L. Nowles at Webb City, Mo.

Nowles is at Springfield, Mo., with Cap Sheaf, a three-year-old brother to Big Reaper 2:19¼, and a two-year-old by Dare Devil, out of Leonine. He expects to put both of them in the list which will give her six, all horses or geldings. Her fillies have been very unfortunate. A daughter of Mulatto by Aberdeen, was taken to Oklahoma before she had a chance to show her value in the stud. Her owner lost his mind and it is more than likely that she and her progeny may bob up among the untraced. Chapwell, a sister to Big Timber, died as a three-year-old. A daughter of Kiosk has been traded around and not bred in speed lines, so that the old mare that died last year will have to depend on her sons for all the reputation there is coming to her for the future.

Peter the Great has now fairly earned the title of "The greatest living sire of trotters." He has in 1913 added two more 2:10 trotters, making sixteen at the present time, while McKinney, who has held the lead so long, is only credited with fourteen trotters in the 2:10 list. Peter the Great added four in 1910 and 1911, something not accomplished previously. Jay McGregor did the trick in 1912 and Peter the Great in July has a four and a five-year-old new to the 2:10 list.

Contrary to the expectation of some of the students of the problem, the sons of Peter the Great are showing up as sires with consistent regularity. The fastest son by the records owned in the United States is in the stud at the King Hill Stock Farm at St. Joseph, Mo., Capt. Aubrey 2:07¼, the same record as his sire. He is now credited with two in the list, one three-year-old and one in the 2:20 list. The mare Aubrión that has made a race record better than 2:20, was a consistent winner in last winter's ice racing. Capt. Aubrey is not the only son of Peter the Great owned in Missouri that will find a place in the great list of sires. The second son of Peter the Great to sire standard speed was owned at the time at Kansas City, Mo., and was at home on the Williams stock farm at Belton, Mo. Peter Red was sold on the track at Readville by his Kansas City owner after he had demonstrated he was better than a 2:10 trotter, and although by Peter the Great was already a sire of standard speed. The King Hill people have a son of Peter the Great out of the dam of Gen'l Watts (3) 2:06¾, and at Kansas City they have one out of a

double producer, Peter Ashland owned at Marshall, Mo., should be one of his greatest sons.

BROOKFIELD, MO., RACE MEETING.

The race meeting given by the Brookfield Fair Association, July 15-18, was marked by four days of good racing and the meeting was a pronounced success in every way.

Following is a summary of the different races:

July 15—2:25 pace; purse \$500.
Miss Belle Patchen, b. m. 8 8 0 1 1 1
Easter Kid, b. g. 1 0 2 2 2
D. P. J., br. h. 2 2 0 6 6 4
Time—2:13¼, 2:14½, 0:00, 2:13¼, 2:15, 2:15½.

Three-year-old trot; purse \$300.
Sure Mike, br. c. 2 1 wo
David Look, br. g. 1 6 dr
Major Stout, ch. c. 4 2 ro
Time—2:19¼, 2:22¼, 0:00.

Two-year-old pace; purse \$200.

Princess Patchen, b. f. 1 1
Kewanee Ruth, b. f. 3 2
Ross Directum, b. c. 2 3
Time—2:34, 2:29¼.

July 16—2:27 trot; purse \$500.

Ossory, b. c. 4 7 1 1 1
Miss Willie, ro. m. 2 2 3 6
Adelaide Benson, b. m. 5 5 2 2

Time—2:19¼, 2:18¼, 2:18¼, 2:19¾.

2:22 trot; purse \$500.

The Russell, b. h. 4 2 3 3 3

Blanche B., b. f. 6 4 1 2 2

Edna H., bl. m. 1 6 5 4 4

First and second money were divided between The Russell and Blanche B.

Time—2:16¼, 2:16¼, 2:18¼, 2:16¼, 2:17½.

Three-year-old pace; purse \$300.

Direct Gentry, ch. c. 1 1
Clifford Hoyt, bl. c. 2 2

Peter Wood, Jr., b. c. 3 3

Time—2:21½, 2:15¼.

Two-year-old trot; purse \$200.

Rosa Lee, b. f. 1 2

Royal Hall, b. g. 3 1

Mudge Kewis, b. f. 2 3

Time—2:34¼, 2:38¼.

July 17—2:16 trot; purse \$500.

Mary Louise, b. m. 2 1 1 1

Pulsus, Jr., b. h. 3 2 2 3

Early Alma, b. m. 1 4 5 5

Abbie Frost, ch. m. 4 5 4 4

Time—2:15¼, 2:14¼, 2:13¼, 2:15.

2:13 pace; purse \$500.

The Climax, bl. h. 1 1 1

May E. Pick, b. m. 2 5 2

Pearl L., b. m. 4 4 3

Time 2:11¼, 2:12¼, 2:14¼.

2:09 pace; purse \$500.

Minnie Chimes, b. m. 2 1 1 1

Roy Wilkes, b. h. 1 2 2 2

Early Thacker, b. g. 3 3 3 3

Time—2:09¼, 2:09¼, 2:12¼, 2:14½.

July 18—2:17 pace; purse \$500.

Major Hunter, b. g. 1 1 1 1

Brown Walnut, br. g. 2 3 2

Kennoc, b. h. 5 2 4

Time—2:12¼, 2:13, 2:15¼.

2:11 pace; purse \$500.

It Will Tell, b. g. 2 1 1 1

Jay Patch, b. g. 3 6 2 2

Lady H., b. m. 6 2 3 3

Arnold Patchen, b. h. 1 3 6 5

Time—2:13¼, 2:10¼, 2:12¾, 2:14¼.

PATRIOTIC SERVICE.

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FARRIERY

The Art of Shoeing Horses

Everyone who owns a horse should have a copy of "Shoeing Horses," by R. Boylston Hall, who has been engaged in "balancing" the feet of horses for over 45 years. The author is now 74 years old and wishes to dispose of some 300 books at a price which will enable horse owners to buy without hesitation. The author wants to do some good in the way of increased comfort to the horse, and we have arranged to take the entire edition and send them to horse owners with a yearly subscription to COLMAN'S RURAL WORLD for \$1.25. Send in your order at once, as they won't last long.

Address COLMAN'S RURAL WORLD, 22 Holland Building, St. Louis, Mo.

Forest Grove, Oregon, March 18, 1913.
Mr. R. Boylston Hall,
40 State St., Room 43, Boston.

Dear Sir—I wish to apologize for not acknowledging receipt of your book on Horse Shoeing before. Your book arrived just as I was moving, and I didn't have time till a few days ago to read it. You certainly deserve full credit for your work and the congratulations of every horse owner. The easy and clear way you explain your principles makes it a book that everybody can read and understand, this alone being worth more than all the treatises written on that subject so far. Hoping that you are getting all the credit due to you, and again thanking you for remembering me. I am, yours very truly,

(Signed) C. P. McCAN.

benefiting himself financially, but he is at the same time rendering a broad-minded patriotic service to the man within his sphere of influence. He makes it possible for them to secure pure seed with which to improve their native stock. The progeny resulting from the continued use of Percheron sires is larger, stronger and better adapted to farm work than the light weight horses which constitute the foundation stock of most localities. More work is done at less cost, corn yields are greater, and the surplus horses sold from the farm bring more money than before. Percheron blood brings them up to the draft standard. The individual and community benefit from increased returns.

TWO BIG MISSOURI FAIRS.

Two big Missouri fairs that are worthy the attention of the horsemen are the Cape County Fair at Cape Girardeau, September 17 to 20, and the Tri-County Fair at Sikeston, September 24 to 27. These meetings are preceded by the Southern Illinois Fair Circuit and followed by Paducah and three States Fair Circuit. The programs are attractive ones, with purses of \$300 for the light harness horses and also races for the running horses. The entries for the Cape Girardeau meeting close on September 7 with J. T. Nunn, Jr., secretary, and for the meeting at Sikeston, on September 19, with Harry Smith, secretary.

\$1,000.00 SHOW RING FILLED.

Knox City Fair, first meeting of North Missouri Show Ring Circuit, fills saddle stake with 13 entries, as follows:

Captain Jenks, Johnson & Marks, Monticello, Mo.

Snap, Jas. H. Wilson, La Belle, Mo. Ginger, S. H. Thompson, La Belle, Mo.

Major Johnson, Tom Bryan, Palmyra, Mo.

King Monroe, Buckman Bros., Shelia, Mo.

Johnnie Jones, Buckman Bros., Shelia, Mo.

Easter Cloud, H. A. Greenwell, Lakenan, Mo.

Lelia Star, H. A. Greenwell, Lakenan, Mo.

Eviline, D. W. Ellis, Williamstown, Mo.

Grassland King, C. C. Caldwell, Leonard, Mo.

Jack Ragsdale, Gross & Vickey, Marion, Mo.

Jim Coby, H. C. McCahan, Kirksville, Mo.

Diamond Denmark, Chas. M. Harrington, Kirksville, Mo.

\$225,000 IN PURSES.

Stakes worth \$20,000 are offered for both trotters and pacers as one of the most attractive features of the race meetings to be held in connection with the Panama-Pacific International Exposition at San Francisco in 1915.

Two additional stakes at \$20,000 each will be made the leading inducements to international racers from all over the world. These, with but two exceptions, will be the richest stakes given on the harness turf.

The best stake that has yet been given in America was the \$15,000 pacing division of the \$50,000 American Derby, raced over the Readville track. \$10,000 events for pacers have been given but rarely; purses with a total value of \$5,000 have been the customary allotment for side-wheeler.

Daniel O. Lively, Chief of the Department of Live Stock, of the Panama-Pacific International Exposition, has officially announced that two harness race meetings will be held at San Francisco in 1915. The two meetings—two weeks of racing in June and two weeks in October—will be held under the auspices of the Pacific Coast Trotting Horse Breeders' Association. Chief Lively has already directed a schedule to be drawn up by J. C. Kirkpatrick, I. L. Borden, J. A. McKerron and Secretary F. W. Kelley, of the Pacific Association.

The race program will approximate \$225,000, offered in stakes and purses in addition to prizes in trophies and plate.

At an early date there will be published simultaneously for distribution in America and abroad a diagram and tentative program which has been prepared in so simple and yet so comprehensive a manner that horsemen will easily grasp its most salient features. The liberal conditions that accompany

the program are such as will readily appeal to horsemen from all countries.

In preparation for these events a new mile track is now being constructed at the exposition grounds. It is declared by experts that this track will not only be one of the most picturesque but one of the fastest in the world, qualities that alone will undoubtedly draw to San Francisco in 1915 enthusiasts from every horsefancying country in the globe.

REAL MONEY FOR STOCKMEN AND FARMERS.**Feeder Cattle Contest Attracts Wide Attention.**

The Feeder Cattle Contest to take place at the St. Louis National Stock Yards, September 1st to September 26th, continues to arouse great interest throughout the West. This is the first event of its kind that has ever been held in the United States. The scarcity of good feeding steers at the present time is acute and any event that tends to arouse interest in the increased production of a better class of feeders appeals to the western cattle man.

There is no red tape about the contest at St. Louis and no entrance fee required. As high as \$200 cash prizes will be offered for single loads of feeders including sweepstakes. Kansas, Colorado, Oklahoma, Texas, Arkansas, Missouri and Illinois are the states that are invited to participate in the Contest and try for prize money. H. F. Parry, Secretary, Feeder Cattle contest and try for prize money. H. says: "The uncertain crop and pasture conditions this summer may cause a failure of many good steers to get killing fat as intended. These kind all make good feeders and should prove prize winners."

HORSES AND MULES.

HORSES—The run included a large number of chunks and drafters and, as usual, these kinds tend to bring a lively trade from the Eastern buyers. The Southern trade was not active. Not as many buyers from this section were present at the auction and trade was a little weak in this division. The general market was about steady.

Heavy draft, extra.....	\$210@250
Heavy draft, good to choice.	175@200
Eastern chunks, extra.....	160@200
Eastern chunks, plain.....	100@135
Southern horses, extra.....	125@150
Southern horses, plain.....	50@75
Choice drivers, with speed.	175@275
Saddlers.....	150@250
Plugs.....	5@20

Mules—Big mules were the most in demand and any kind of a good, big shipper or work mule was taken at a satisfactory price. Miners of all classes were good sellers, and like the other prices, were satisfactory.
16 to 16½ hands.....\$160@280
15 to 15½ hands.....100@225
14 to 14½ hands.....60@140
12 to 13½ hands.....50@120
Plugs.....20@75

Thomas Ficklin of Stanberry easily holds the title of blue grass king of the world. Each year Mr. Ficklin employs many men and teams and with his numerous headers gathers the seed from thousands of acres of blue grass that covers the hills and valleys of Northwest Missouri. The blue grass harvest has just closed and Mr. Ficklin has on hand over 10,000 bushels of seed. He has been offered 80 cents a bushel for it, but is holding it at a dollar. His mill at King City has been threshing steadily since last February and still is thousands of bushels behind. This year's crop, while gathered, is not yet cured, and it will take a number of men several weeks yet to cure and care for it.—Stanberry Sentinel.

PANTS BY PARCELS POST!

Buy Direct from Manufacturer at Wholesale Prices, and Save Merchant's Profits, Freights and Commissions.

**PANT NO. 125, GUARANTEED ALL WOOL FILLING.**

\$200.00 Reward if cotton is found in filling of this Pant.

Pants are full cut, two side buckles, six belt loops, wide bottom turn-ups, outlet seat seam. Warranted thoroughly scoured and shrunk. Colors: Dark steel or brown. Price, by prepaid parcels post.....

\$1.25

We also make Pants from \$1.00 to \$3.00 per pair, from a full line of choice styles and fabrics.

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The Only Mill Selling Pants by Parcels Post Direct to Wearer.

SOUTHERN WOOLEN MILLS CO. DEPT. A.

Reference: First National Bank. CORINTH, MISSISSIPPI.

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THESE books are for Home-builders and Business Men seeking new locations. They are handsomely illustrated and give a plain, practical portrayal of Missouri's wonderful resources, developed and undeveloped.

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821 Holland Building, St. Louis, Mo.

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Published Weekly—52 Copies for 50 Cents.

FARMERS' EQUITY UNION

NATIONAL HEADQUARTERS

GREENVILLE, ILLINOIS

NATIONAL OFFICERS

Pres.—C. O. Drayton, Greenville, Ill.
Vice-Pres.—L. F. Hoffman, Mott, N. D.
Sec'y—Miss Inez Bluest, Greenville, Ill.

Official Paper—
COLMAN'S RURAL WORLD.

Our Slogan: "Farmers Must Be Co-operators"

WINES, DIAMONDS AND OSTRICH FEATHERS.

Editor RURAL WORLD: The World's Work for July says, "that we imported more than fifty million dollars worth of works of art the last nine months, and in the same time thirty-five million dollars worth of diamonds came in. Also seven and one-half million dollars worth of fine wines and nine and one-half million dollars worth of imported ostrich feathers." So we see that the high cost of living has not pinched some classes of people in our country.

This is the special privileged class. This is the few who combine in "big business," and co-operate for the special purpose of centering the immense wealth produced by the toiling masses in their hands. They murder the business of every small competitor in order that they may monopolize the business. These few men filch billions of dollars each year from the people who work hard for the necessities of life and spend it for wines, diamonds, feathers, auto and poodle dogs.

How long will the people support a business system which robs them year after year of three-fourths of their wealth and leaves them only a bare existence? As long as we support the system we will have it, and be responsible for it, and pay for their high wines, fine cigars, diamonds and imported feathers.

"We the people" are sovereign. We have the divine right and responsibility to rule in politics and business. It is up to us to combine in industrial unions and run our own business in such a way that we get all the wealth we produce. It is not right for a farmer to refuse to unite in the Farmers' Equity Union or some other co-operative Union. Every farmer who refuses to organize and support a co-operative system in buying and selling is helping to continue the "robber system" which deprives his family of the comforts of life and forces him to buy wines, diamonds, feathers and autos for those who toil not, neither spin, and yet Solomon in all his glory was not arrayed like one of these.

No farmer should complain or growl about bad deals or bad conditions, if he refuses or neglects to organize. He can send ten two-cent stamps to Farmers' Equity Union, Greenville, Ill., for the "Equity Text Book," and read our practical plan of golden rule co-operation. He can write for an application for charter and get nine other farmers to sign up with him. Then, they will be a link in our great co-operative chain and we will build them up until they have 100 good farmers united, all reading our co-operative paper, weekly, all meeting monthly and all buying and selling cooperatively. Give us enough Equity Unions, thoroughly organized and educated on our plan of business and we will quit buying wines, diamonds, feathers and autos for the extremely rich aristocracy.

We will compel the wealth we produce to come out into the country for better roads, homes, schools and churches. We will develop the country instead of centering all of our

wealth in the cities. We will increase the prosperity of our entire nation 50 per cent. President Wilson says that "Human freedom consists in perfect adjustment of human interests and human activities and human energies." This is the great purpose of the "Farmers' Equity Union." We want the people to be free, politically, industrially, and socially. We believe that economic freedom is only possible to an intelligent, moral, fraternal people. Hence our object is to promote the intelligence, morality and fraternalism of our members and to make them golden rule co-operators.

To this end we work, as an organization, winter and summer. Our campaign of education is incessant. We are continually educating and building up our Local Unions and Exchanges. We work hard for actual demonstration at the best markets. The most of our Exchanges are prorating back seven or eight thousand dollars to our members as a result of one year's business. Demonstration is the best educator we can get. Liberal, Kans., Equity Exchange has paid 5 per cent for capital owned by stockholders and 12 per cent for patronage the last year. Other Exchanges in North Dakota have done nearly as well.

We will quit buying wines, diamonds and ostrich feathers for the lazy rich when enough farmers unite in the Farmers' Equity Union.

Greenville, Ill. C. O. DRAYTON.

HARVEST AND SELLING.

Editor RURAL WORLD: Harvest is upon us and from now on to the end of the year Equity farmers will be selling the products of their land and hard toil to some one, and we hope much more of 1913 crop will go direct to consumer than did 1912.

We well know Equity cannot sell direct to consumer unless consumer is also organized to take the produce, or Equity places her Exchange in reach of consumer which, Equity must do, for Equity cannot be held back on account of an outlet when the teeming millions of consumers must have our produce.

Equity is not a farm organization that wishes things were so and so, but she plans ways whereby farming receives its just rewards.

Equity knows the world must have her production and she also knows she has the plan to reach consumer without the long line of middlemen.

Equity locals, if you must buy potatoes, onions, apples, pears or any produce or seed oats or seed wheat or hay or alfalfa or what not, let your wants be known through the paper to your sister locals that you yourself don't hold to the long line of middlemen.

Also, locals that have a surplus to sell of any farm product, let it also be known that those in need can get their supply direct from you.

These little things together with the national deals made by the National Union is as it grows the very thing that saves you money, makes you money and places you in reality on grand Equity principles.

The only way you can gain by Equity is to use Equity, use her prin-

ples, use her plan, and in doing so you will find that you are a man.

Equity locals that have not your Exchange and manager yet, don't you see you are missing much that you could gain if you were in Equity position.

Unorganized farmers get ten of your farmers together and write Equity if you wish to be built up to 100 strong.

Farmers, if you gave your boy a piece of land to put in potatoes and at potato digging time he could get in town of the town folks 80 cents a bushel, but to save trouble he sold to a neighbor boy for 40 cents. What would you think of your boy and if the neighbor boy could find enough "suckers" like this he wouldn't need to raise many potatoes himself.

Farmer, if you cling at the mercy of the middlemen you are worse than your boy and the world has the honest right to call you the "old hayseed."

Farmers, you can't individually sell direct to the consumer in the city nor buy direct from other farmers as well as factory, mine and mill. You must organize and co-operate for the good of yourself as well as the good of all.

You surely can see your condition, and why not make the most of your advantages and get together in some farm organization and follow principles that you know you must follow to be a true man.

Don't be worse than the simple potato boy and sell to a sharper or to someone that has more get-up than yourself. Have get-up of your own.

I tell you I am glad the government and so many farm organizations are doing so much for the poor "hayseed."

Poor, hard-working farmer, all these things are to make you stronger and to place you on true manhood, and to place the sons of toil and his produce in brotherly connections with other sons of toil.

God gave you a mind to guide your works and may you use the God-given power within you.

If you could use yourself right and the world right without getting together on these lines, it would be well enough to go "happy go lucky," but you not only suffer but the world suffers because of your indifference to right, justice and manhood.

Virden, Ill. V. WIRT.

CATTLE AND THE TARIFF.

Editor RURAL WORLD: I have had three cattle buyers tell me within the last week that the tariff is going to reduce the price of cattle. I don't think the tariff will affect the price of cattle for any length of time, but I do know that if the cattle buyers all over the United States get only one or two farmers scared at each shipping point, the run of cattle to the central markets will increase, perhaps exceed the demand. The packers and speculators reap another harvest at the expense of the stockraiser.

Mr. Farmer, the cattle buyer is not going to take greater risks than you are taking; he is not going to pay you a large price if he knows that cattle are going down.

Mr. Farmer, join the Farmers' Equity Union and study the dumping system, study the speculators way of resorting to and encouraging the dumping system for their own benefits at every opportunity. Education and co-operation is the only thing that will break up the dumping system.

A. E. BORG,
Sec.-Treas. Local No. 8.

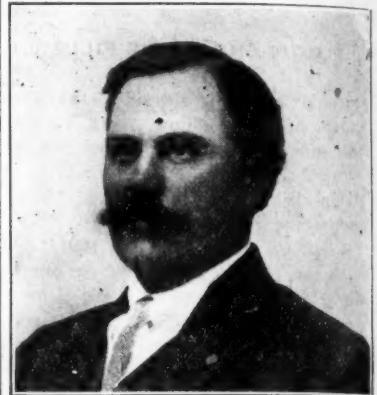
Application has been received by the government for a summer home colony on the Shoshone national forest, Wyo. The plan is to have a central hall for community gatherings and separate cottages for families of the communal recreation center.

W. G. HARNDEN MAKES STATEMENT OF WHAT EQUITY UNION HAS DONE FOR HIM—MADE NEARLY \$300 IN ONE YEAR!

Editor RURAL WORLD: When our Equity Exchange Association was organized in the spring of 1912 I bought one share (\$25.00) for which I gave my note. When I began to market my wheat in October I paid this note and became a stockholder.

During the year which ended, June 1, 1913, I did \$2,435.91 worth of business through the Exchange.

At the end of the year they prorated back to me 12 per cent of my pat-



W. G. HARNDEN, Liberal, Kan.
Equity Union Member.

ronage, which is \$292.30, and gave me a five per cent dividend on my investment (\$25.00) or \$1.25. \$75.00 of this I received in three additional shares of stock and a check for \$218.55. Of course I was pleasantly surprised that I received so much, as I had thought if I received the three additional shares I would do well. But do you realize that I received almost 1200 per cent on my investment? Money talks. Quite a number of farmers have come into our organization lately, among them those who were the most bitterly opposed to our organization a year ago. Yours for the success of the Equity Union.

W. G. HARNDEN.
Route 2, Liberal, Kans.

REGENT EQUITY UNION.

Let Us Hear from the Builders and Managers of Elevators.

Editor RURAL WORLD: For once someone on the North Dakota prairies left the plow handle long enough to write a few lines for the good of the cause. As J. B. says, Drayton, Wirt and Line do the big share of the news-question, but how about getting the elevator managers to exchange ideas upon the construction of an elevator, equipments needed to operate same, etc.? There is no question that the directors of our newly organized Exchanges are at the mercy of the contractor when they come to build their elevator, both as to price and equipments. If I were to build an elevator I would be sure to get a large enough iron pit, so that both dump logs would go inside the pit, thereby saving the grain from spilling outside the dump, and the extra costs in the larger pit would be saved the first year on grain going to waste on the smaller dumps, and I am not very keen on the automatic scale at the top, or, for that matter, neither top or work floor, but would put in two legs and the good old 100-bushel hopper. The object of two legs is this: You can take in any kind of grain over the dump and still weigh and load out into the car without a hitch anywhere, and no elevator should ever attempt to ship a single car of grain without being weighed into the car and a record

kept of each and every draft put into the car.

A spout should be run from about half way up on the side bins in the grain if he thinks best. Besides hopper—just clearing the hopper, so that the elevator manager can mix it saves half the elevating. Last but not least, no elevator should be without a good cleaner, especially for flax; on all flax showing more than 5 per cent dirt it pays to clean, while I would not say it does not cleaner flax. Say that your flax runs 12 per cent or nearly 7 pounds to the bushel, that you pay the freight to market on "a loss." Then, again, there is always a chance to sell that stuff right at home.

I shall be pleased to have some one answer this, as I believe it to the interest of all concerned to exchange ideas on the construction of the elevator, and may be a help to some new Exchange that contemplates building an elevator. I would not boast for any particular line of machinery or engine to be used, but I am using Fairbanks-Morse Type N, kerosene engine, which I find does the work at all times if properly taken care of.

There is, however, a registering device attached to the scale beam, very extensively pushed upon the Equity Exchange elevators, that I would warn any and all against; cost \$5.00, I think, and the company's great plea is that you can not cheat the farmer by using the registering device. In the first place, the "blame" thing does not print all the figures, and in the second place all the record the buyer has at the end of his day's work is about a cord of blotting paper slips, which the company sells you at \$2.50 per M, and all it stamps is the gross and tare, and you still have to figure out the net pounds and bushels, so give me the regular scale book.

Will some other Exchange buyers or managers please write a few lines giving his or their views?

With the best of wishes to all from Regent Equity Exchange.

A. K. MOEHN, Manager.
Regent, N. D., July 10, 1913.

PRODUCTION AND DISTRIBUTION.

Editor RURAL WORLD: Industry is one vast machine divided and subdivided into many parts, many of which are wearing out and being substituted for parts that are new. Our agricultural industrial machine is two principal parts, viz., production and distribution. The piece of machinery was never built that could wear and give perfect satisfaction forever. So it becomes necessary to improve or build new in the course of time. We farmers have improved our productive industrial machine until all at once we found that there was something wrong. It was out of joint, and it began to affect other machinery of industry. So the fellow who is looking after our distributive industrial machine said to us farmers, your productive machine is out of joint, you are not producing enough.

Now this "Clod Hopper," as we have been termed, is not as foolish as he used to be. He did not take this all for granted as he once did, but he began to think. He examined his part of the machine and found it to be running very nicely, producing thirteen billion dollars the last year, but the men who were caring for the distributive machine took six billion, and the railroads one billion, leaving only six billion for the producer and other tributaries.

Now this tributary fellow has a lot of privilege. How he got it is a mystery, but he got it just the same and always does. We found by investigation that he just simply took it, so

we have made up our minds that it would be useless to try to repair this old distributive industrial part of our agricultural machine, so we decided to build a new and better one.

Now all hands are busy, all the unnecessary tributaries went in after culling the owners or the supporters of this old machine, we found that it would be impossible to build a new machine out of old material and that we must, in order to relieve it of all friction, discard the objectionable parts such as the speculator gambler in farm produce who will insist on under-pricing, short weighing, cornering the market and starving thousands of mothers, dwarfing the bodies of their offspring. In fact, we found that every crime, every degrading passion had its birth here; sickness, wickedness and all the ills of the flesh cry out against this man's inhumanity to man.

We find that actual war between nations, such as the French revolution or the Civil War of America, were Christmas festivities compared with the horrible crime being committed by the managers of our distributive industrial machine.

Now our plans are completed. The Equity Union plans are the best to be found and we are very busy laying the foundations. We have seven million farmers and their families, thirty-five million in all, and just as fast as we can, will put them all on the job. We know now that it takes more intelligence to build and operate the distributive machine than it does to operate the productive machine. We must build out of the best material, good clean stuff, and knowledge shall be the framework.

This machine will be built exclusively for the producer and consumer of farm produce and will be owned and controlled by and for him. He that does not produce products shall not enjoy the fruits thereof. He that is a necessary distributor may be a part, but all unnecessary tributaries will be put upon their own resources. You can have this for the asking when you and I are your and my brother's keeper.

T. L. LINE.

NOTES FROM AN ILLINOIS FARM.

Editor RURAL WORLD: I may have said in these notes that my stand of alfalfa did not suit me, and that it was plowed and sown to wheat last fall. We threshed it a few days ago and the one and three-fourths acres yielded 72 bushels, or 41 bushels per acre. The next highest yield in our township was 31 bushels.

The patch will be thoroughly disked, relimed, inoculated and resown in August if we get sufficient moisture.

Wheat is yielding well and corn is doing well, but oats will not yield half the seed that was sown, and on an average it will take five acres to make a ton of hay.

We had a pretty busy day yesterday, even if it was Sunday.

A neighbor who had been a friend for 40 years died on Friday, and my nearest neighbor on Saturday. The one was buried in the forenoon; there was a very large attendance and Masonic rites that lasted till 12 m. We then had to hurry home and get dinner for preacher and undertaker for the other funeral.

The first left his family well provided for; the second left wife and two babies with almost nothing. I phoned a few neighbors, and this morning there were twelve cultivators in the widow's cornfield and it was all plowed—about 25 acres—by 10 o'clock.

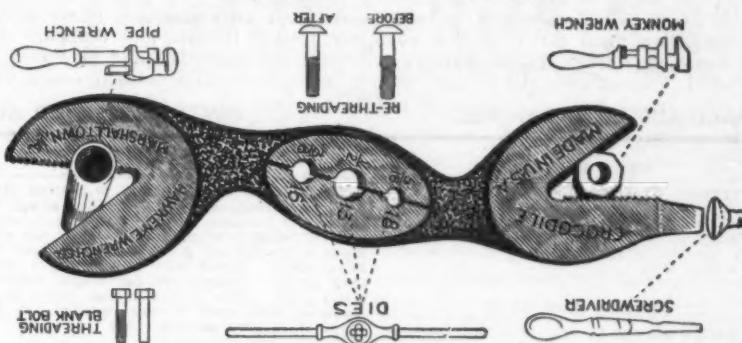
Olney, Ill., July 14. AGRICOLA.

A great many gates are needed on the farm. There's the propagate, the fumigate, the irrigate, the subjugate, the big gate and the little gate, and others that might be mentioned.

THE CROCODILE WRENCH

All Around Handy Tool for Home, Farm and Shop

FREE With One Yearly Subscription to
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Six Handy Farm Tools in One

THE CROCODILE WRENCH is drop forged from the finest tool steel and scientifically tempered. Every Wrench guaranteed against breakage. It is 8½ inches long and weighs ten ounces.

A pipe wrench, a nut wrench, a screw driver and three dies for cleaning up and re-threading rusted and battered threads; also for cutting new threads on blank bolts. Dies will fit all bolts used on standard farm machinery.

Teeth and dies are case-hardened in bone-black, making them hard and keen.

The dies on this wrench alone would cost \$1.50, and would be worth more than that to every farmer, as they would often save valuable time, besides an extra trip to town for repairs.

Requires no adjustment; never slips; is simple and always ready for use. Will work in closer quarters than any other wrench.

Handy tool to carry on a binder, reaper, mower, etc.

Handy for removing all removable calks.

Light, strong, compact and easily carried in the hip pocket.

A convenient household wrench. A real farm tool.

Sent, postage prepaid, with one yearly subscription to COLMAN'S RURAL WORLD, \$1.00. Send in your order at once.

DIVERSIFIED FARMING.

Editor RURAL WORLD: Diversified farming is the only system that will bring permanent success. The farmer who grows the same crop in the same field year after year will soon impoverish his land. Each product grown is a heavy feeder of a certain element of soil fertility, and the year-after-year growing of the same crop will soon exhaust the soil of that particular element on which it draws the heaviest. On the other hand, a well-planned rotation draws more evenly upon all the elements of fertility and a more balanced condition of the soil is maintained.

Each farm product grown has its particular insect enemies. The growing of the same crop on the same soil year after year makes the conditions favorable for the rapid multiplication of these insect pests, with the result that very often the crop is greatly injured or destroyed. A rotation of crops has a tendency to starve these pests out, since the plant on which they subsist is found no two years in succession in the same field. A diversified system of farming also holds weeds in check, since weeds, like insects, are partial to particular crops.

The farmer, as far as lies in his power, should so plan his crops that the cultivation or harvesting of one will not result in the neglect of another. Of course, backward or rainy weather will, at times, throw one behind with his work, with the result that several fields may need attention at the same time.

But aside from this condition, the farmer should plan his crops with the idea of keeping men and teams busy during the entire growing season. This is only possible with diversified farming. Where but one product is grown, there will be certain times when teams and men will be idle.

Where diversified farming is practiced, each field at regular intervals of three, four or five years, according to the condition of the soil, should be planted to a legume. Many plow this crop under, but larger profits can be realized by mowing and feeding this

BIGGEST BARGAIN EVER OFFERED in the Mail Order Business for Beginners and Others.

1. The address of 3 firms who will print your Circulars (your own copy) free.
2. Address of firm who will print you Letter-Heads free.
3. How you can get Envelopes (your return card printed) free.
4. Address of 50 firms who want Commission Circulars mailed.
5. 10 firms who furnish you Free Imprint Circulars. (Your name printed on them.)
6. A Big Combination of Several Hundred Papers and Magazines, in which you can insert your ad. at very low cost.
7. Copy of "The Monthly Mail" for you, the Great Exchange Story Mail Order Magazine and Mailing Directory.
8. List of 500 Reliable Circular Mailers with whom you can exchange and who will help you secure business.
9. Copies of "The Mechanical Digest," The Booster Magazine, Advertising World, Mail Order Journal, Agents' Magazine, Circular Mailers' Digest, Mail Order Advocate, Mail Order Herald and several other good Mail Order Papers. These alone worth \$3.00.
10. The address of 7 Syndicates in which you can start publishing a Magazine of your own for \$1.00.
11. Names of 50 small papers which insert your ad. for a few cents and you mail 100 copies.
12. 1,000 of our Assorted Commission Circulars, which should pay you not less than \$10 to \$50.
13. 300 names of people who sent us 25c each.
14. Copies of hundreds of Circulars and Small Papers.
15. "My Book," "How You Can Make \$50.00 or Better Per Week." Price, \$1.00.
16. The names of 20 firms who pay me cash for mailing Circulars.
17. How you can have your ad. inserted in publications at less than publisher's price.
18. All of the above and much more valuable information for only 25c. Money Order preferred. Address
MELVIN C. CHURCHILL, Houston, Tex.

crop to live stock. From 75 to 90 per cent of the fertility of the soil removed by the growing of crops is returned if the manure is carefully preserved and spread on the soil.

The farmer who practices rotation of crops, planting at least one-fourth of his tillable land to a legume each year, and marketing the greater part or all of his crops through live stock, eggs, butter, milk, etc., can, with very little expense for commercial fertilizer, maintain the fertility of his soil.

The farmer who sells his crop direct sells part of his fertility—part of his working capital.

Cannelton, Ind. T. Z. RICHEY.

CLASSIFIED WANT and FOR SALE DEPARTMENT

YOU CAN BUY, SELL OR EXCHANGE MOST ANYTHING IN THESE COLUMNS AT THE LOW RATE OF

One Cent a Word Each Insertion.

In this department we will insert your advertisement under a classified head for 1 cent a word per issue. Initials and numbers count as words. These little ads are read by thousands and give results. No ad accepted for less than 25 cents, cash to accompany order.

SMALL ADS DO BIG THINGS.

TRY A CLASSIFIED AD.

HELP WANTED

POSITION WANTED—By married man on grain and stock farm; experienced in all kinds of farm work and stock raising. For salary or on shares. For further particulars, address S. E. H., care Rural World, St. Louis, Mo.

FARMS FOR SALE

FARM FOR SALE—My farm of 252 acres in Daviess County, Mo.; well improved. For full information address: Owner, John L. Dillon, Hamilton, Missouri.

FOR SALE—106 acres good land, high state cultivation; two miles to station; nice location. Price eighty dollars an acre. Write for information. T. O. Mead, Metz, Mo.

FARM FOR SALE—75 level acres; good roads; phone; improved, fine land. Particulars for stamp; \$60 acre; title perfect. R. Conklin, Route 4, Coulterville, Ill.

FOR SALE—40 acres of good fertile land in the "Illinois Fruit Belt." Price, \$45. Description and particulars for stamp. Address: Box 127, Galesburg, Ill.

FARMS FOR SALE—260 acres, about 190 cleared, all seeded to clover; good spring, good 6-room house, good barn, and other buildings; fruits; near school and church; on public road; R. F. D. and telephone; 7 miles from good town.

Also, 95 acres, good soil, good house, barn, and other buildings; well with windmill at barn, cistern at house; 6 miles to good town, near country store, on R. F. D. and telephone. Write for prices and particulars. Ed. H. Meyer, Owner, Route 1, New Haven, Mo.

1600 ACRE FARM AND STOCK RANCH

FOR SALE—At low price; land is rich black sandy loam, nearly all level; ranch is stocked with fine cattle; will sell ranch and cattle together or will sell ranch alone; this ranch is on main line of Rock Island R. R., and two miles from good shipping point. Would like to correspond with someone interested and tell you more about this farm and stock. Prefer to correspond with parties who expect to buy, as I am going to make this a gilt-edged proposition to the right man. Address the owner, M. E. Dahmer, Mississ., Meade county, Kansas.

FARM FOR SALE—120-acre, well-improved farm, black soil and rolling, blue grass pasture; good location, 3½ miles to depot; telephone and R. F. D. passes door on main road; all fenced and cross-fenced; 8-room house; \$75.00 an acre, one-half cash, balance to suit purchaser at 5 per cent. Write to Box 62, New Cambria, Mo.

400-ACRE FARM FOR SALE—12 miles north of Florence, Ala., 2 miles from Cloverdale, Ala. Seven-room dwelling and two tenant-houses. Two-thirds of land cleared and fenced, balance in good timber. Four springs, one creek. Will make ideal stock farm. Price, \$20.00 per acre, one-half cash. J. D. Weeden & Co., Florence, Ala.

FOR SALE OR EXCHANGE—165-acre farm, 50 acres open, balance in fine timber; good improvements; city income property preferred. Address Box 65, Whiteside, Mo.

FARM FOR SALE, CHEAP

—116-acre farm, four miles south of Union, the county seat of Franklin County, Mo., on gravel road, 51 miles west of St. Louis. All kinds of grain and grass can be grown. Part up land and part branch bottom; 80 acres cultivated, balance pasture and timber; good 6-room house with cellar, large new cistern, never-failing well; out buildings, young orchard of apples, peaches, pears, plums, cherries, small fruits; telephone, R. F. D., one-quarter mile to good school, on Union-St. Clair public road; fine neighborhood; a very desirable place to live. Getting old and want to get off of farm; \$47.50 per acre, worth more; \$1,000 down; time on balance if desired. Address owner, R. N. Leitch, Union, Mo., R. F. D. No. 2.

ACT QUICKLY if you want the best bargain ever offered you. 8,000-acre stock ranch, 5 miles long, 2½ miles wide; 56 springs; 1½ miles of water-stream; 28 miles from Springfield and ¾ mile from railroad station. Address owner, A. J. Johnston, Merchants National Bank Bldg., Springfield, Mo.

ARKANSAS LAND FREE—500,000 acres vacant Government land now open to settlement. Booklet with lists, laws, etc., 25¢. Township map of State, 25¢ additional. L. E. Moore, Little Rock, Ark.

FOR SALE OR TRADE for clear land, 30-room hotel, well equipped, 3 lots in new county-seat town; cost \$12,000 4 years ago. Minnesota or Dakota land preferable. Address Box 187, Mott, North Dakota.

FARMS WANTED

WANTED—To hear from owner who has good farm for sale. Send description and price. Northwestern Business Agency, Minneapolis, Minn.

CLOVER SEED

MAMMOTH SWEET CLOVER FOR SALE—Yellow and White; sow in July, August, September, again later in the season. Write Mrs. J. T. Mardis & Sons, Falmouth, Ky.

RURAL WORLD WANT ADS

MISCELLANEOUS

FARM PRINTING—We make a specialty of letter heads, envelopes, etc., for farmers and stockmen. Samples free. Prices reasonable. Frederick Printing & Stationery Co., 318 N. Third St., St. Louis, Mo.

SELL THE IMPERIAL SELF-HEATING IRON—You can make \$1,000 the next five months if you are willing to work. A postal will bring full information. Write today. Imperial Sad Iron Co., Memphis, Tenn. P. O. Box 90.

"RATS AND MICE QUICKLY EXTERMINATED."

No cats, poisons or traps needed. Learn the secret and keep them away forever. Sure, yet perfectly harmless except to rodents. Secret originally cost \$100, but we will send it postpaid for only 25¢.

The above advertisement has appeared in many magazines. I will send you the genuine recipe for this RAT AND MICE Exterminator (which I know to be O. K.) and 20 fine assorted postcards for 12c. This is a Bargain. Address Milton Boss, 4421 17th Ave., Rock Island, Illinois.

NOTES FROM AN OHIO FARM.

By C. D. Lyon.

Not very well for the past month and doing far more work in the fields than I have been really able to do, explains why I have not written much.

Our haymow is full, 13 feet wide, 36 feet long and 16 feet deep, with thoroughly well settled, well cured clover hay. Now, someone tell us what it will weigh. Our rule, 512 cubic feet per ton, gives 11 tons, but 512 cubic feet of clover hay will make more than a ton.

Wheat stacking is a kind of lost art, but I used to stack, and taught the boys how to do it, so our wheat is in stack safe and dry, while others are fearing that a rainstorm is coming and their crops are in the shock.

Wheat yields are varying from 15 bushels to 35 bushels per acre, and rye from 10 to 22 bushels, while oats are not yielding extra well.

As we stacked our wheat, only 7 acres, I estimated the yield at 125 bushels, or about 18 bushels per acre, but from the way other crops turn out it may make more.

Our corn and tobacco are clean, and the dry spell has not injured them as yet, so I conclude that they owe much of their good growth to the fact that the land was put in good condition before planting, and well cultivated afterwards.

We have not had in all an inch of rainfall since May 1, and water is getting scarce on many farms, but we have had no trouble yet. Our farm cannot be said to be well watered by springs, but by using care with those we have, we have always had enough stock water. The house well is really a spring, ten feet deep, and rather farther from the house than we would like, but then you know that it is not possible to have everything as convenient as it could be desired, and we will always be glad our well water is as good and as abundant as it is.

I might note the fact that some two years ago we had a well drilled at our school house, striking water at 90 feet; then a neighbor had a well put down 120 feet at his house. The schoolhouse well supplies sulphur water so strong as to be undrinkable, and the neighbor has a well of strong salt water, the vein being a very weak one, only running about a gallon of water per week.

Surface wells usually get a fair supply of water here at 16 to 24 feet, and at almost every stock barn is a cistern of 150 to 200 barrels, while a few farmers have tanks or ponds. I'm thinking of making one next year.

Let me say to our Stoddard county friend, that our photographer says: "Any man in my line can and will enlarge photographs at about 50 cents each more than the traveling agents charge and will do a better job. At the same time he will charge about 50 cents to a dollar less for frames than the agents charge."

People like to be humbugged, as is

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Allen M. Rogers

Bowling Green, Mo.

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R. O. KNUDSON, 3637 Shenandoah Ave. St. Louis, Mo.

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evidenced by the vast army of agents tramping the country. "Tramping" did I say? Why, many of them go in automobiles, which goes to show the immense profit they make on the cheap john stuff they have to sell.

July 15. We had a good rain last night and the hot sun of today is making corn grow a "mile a minute."

Harry started the cultivator at noon to go over the last planting the fifth time but will only be able to work afternoons when the corn is wilted, as the arch of the cultivator breaks some stalks.

We will use the 7-hoe cultivator on a few acres, and may drag a mower wheel some in August if we have dry weather.

DIRECT TO CONSUMER.

We wish to call the attention of our readers to add on another page of the Southern Mills Co., Corinth, Miss. Dept. A, who offer to sell their goods direct from their mills to consumer by parcel post. We would advise giving this enterprising firm a trial order, as the parcel post gives you the channel through which you can deal directly with the factory and thus save all the profits of handling by retailers. This is the logical new up-to-date method of doing business—from the factory direct to the buyer. Write at once. Southern Mills Co., Dept. A, Corinth, Miss.

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